




AIR QUALITY MONITORING PROGRAM


RESOURCE RECOVERY FACILITY KURRI KURRI, NSW

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 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	2 of 31
		Prepared By:	C. McClung
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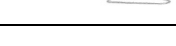
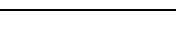
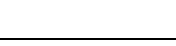
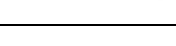
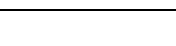
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 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	3 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023








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AMENDMENT LIST

Date	Section	Page	Summary of Change	Signature
18.01.2011	Table 2	11 & 12	Amendment 1 – inclusion of Annual PAH testing (Stacks 1, 5 and 6) for NPI requirements	
28.09.012	Section 1	6	Updated to reflect current version Development Consents, SPL processing activity & scale, and updated wording of AQMP scope.	
28.09.2012	Whole Document	-	Various (minor) wording amendments/updates, as required	
28.09.2012	Table 2	11 & 12	Table update to align with updated EPL requirements	
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19.12.2012	Table 5	18	Table update to define maintenance and mitigation measures in relation to combustion source emissions management	
22.02.2013	Table 2	12	Table update to include NPI and LBL requirements for combustion sources	
22.02.2013	Attachments	5	Update to DPE Mods 8 & 6	


 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	4 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

Date	Section	Page	Summary of Change	Signature
15.09.2015	Whole Document	7, 8, 12, 13	Update to DPE Mods 9 & 7 (Pharma/Drug Trial)	
01.03.2017	Whole Document	7, 8, 12, 13	Update to DPE Mods 10 & 8 (SPL Processing)	
16.04.2018	Whole Document	7, 8, 12, 13	Update to EPL Variation (Exhibit Waste Processing)	
23.09.2019	Whole Document	-	Update to SSD 7396 (Medical & Other Waste Thermal Processing) and DPIE Mods 12 & 10 (Commercial Scale Pharmaceutical & Illicit Drug Waste Processing)	
18.03.2021	Whole Document	-	Update to reflect recent EPL Variation and Modification requirements. Amendments to LBL limit requirements. Minor text edits.	
29.08.2022	Whole Document	-	Update to reflect Modification 14 (Air Emissions Reconfiguration Project).	
14.03.2023	Whole Document	-	Update to reflect EPL Variation to permit processing of pharma & drug waste in Rotary Furnace 2	

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	5 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

CONTENTS

1.	GENERAL	7
1.1	Introduction	7
1.2	Company Description	7
1.3	Relationship of AQMP to Other Site Systems	7
1.4	Scope of the AQMP	8
2.	RESPONSIBILITIES	9
2.1	AQMP Control and Record of Revision	9
2.2	Maintenance of Air Quality Systems	9
2.3	Coordination of Monitoring and Reporting	10
3.	AIR QUALITY CONTROL SYSTEMS OVERVIEW	11
4.	AIR QUALITY MONITORING PROGRAMS	12
4.1	Conventional Operations	12
4.2	TPF – Post-Commissioning Phase	14
4.3	TPF – Operational Phase	16
4.4	Testing Certification	17
4.5	Continuous In-Stack Emission Monitoring	18
4.6	Pollution Studies and Reduction Programs	18
5.	COMPLIANCE ASSESSMENT	19
5.1	Emission Load Limits	19
5.2	Emission Concentration Limits	19
6.	MAINTENANCE AND MITIGATION MEASURES	22
7.	RECORDS AND REPORTING	25
7.1	Record Maintenance	25
7.2	Reporting	25
8.	MANAGEMENT REVIEW	27

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	6 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

TABLES


- 1 Description of Air Emission Control Systems and Discharge Point Sources
- 2 Air Emissions Monitoring Requirements – Conventional Operations
- 3 TPF Post-Commissioning Air Emissions Monitoring Scope – Stack 5
- 4 TPF Operational-Phase Air Emissions Monitoring Scope – Stack 5
- 5 Air Emission Load Limits
- 6 Air Emission Concentration Limits – Conventional Operations
- 7 Air Emission Concentration Limits – Stack 5 (TPF Operation)
- 8 Mitigation Measures and Implementation Timeframes to Ensure Compliance with Regulatory Requirements

FIGURES

- 1 EPA Monitoring Locations

ATTACHMENTS

- 1 Environmental Protection Licence No. 6423 (09 Mar 2023)
- 2 Development Consent DA 86-04-01 and 10397 of 1995 (consolidated; as Modified; 03 Sep 2021)
- 3 State Significant Development Consent 7396 (as Modified; 11 Sep 2020)

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	7 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

1. GENERAL

1.1 Introduction

This document describes the Air Quality Monitoring Program (AQMP) for Weston Aluminium's diversified operations located at Mitchell Avenue, Kurri Kurri, NSW. This AQMP describes the process of air quality assessment and validation, outlines mitigation measures and timeframes designed to maintain compliant performance and respond to any excursions, and the program to monitor the ongoing air quality performance of the facility.

1.2 Company Description

Weston Aluminium operates an aluminium recycling and refining facility at Mitchell Avenue Kurri Kurri, NSW, traditionally recycling aluminium dross and aluminium scrap to produce aluminium sow, ingot and deoxidant puck. Spent Potlining wastes, derived from the primary aluminium sector, are also detoxified and beneficiated for various reuse opportunities in the construction products manufacturing industry. The facility has the capacity to process up to a combined 40,000 t/yr of dross and SPL, and up to 35,000 t/yr of scrap.


As part of business diversification activities, and in response to earlier Trial successes, WA attained Regulatory Approvals to thermally process quantities of Pharmaceutical and Illicit Drug wastes in existing rotary furnaces, and to construct and operate an independent Medical and Other Waste Thermal Processing Facility (TPF) as a brownfield development at its Kurri Kurri facility.

As traditional dross and SPL processing continues in steady decline, scrap metal processing/value-add, deoxidant production and hazardous waste processing will become the focus of sustained operational growth into the future.

Weston Aluminium is committed to product quality, process compliance and personnel safety, and protection of the surrounding built and natural environment. This AQMP incorporates and reflects the high performance standard and environmental protection ethic that is fostered as part of the Company's culture.

1.3 Relationship of AQMP to Other Site Systems

This AQMP is an integral part of the overall management system of Weston Aluminium, and complements elements of the certified Integrated Management System (WHS, Quality and Environment).

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	8 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

1.4 Scope of the AQMP


The original scope of the AQMP was sought by Development Consent to include:

- a program to validate the air emissions of the development, which involved carrying out monitoring of the emissions from the development;
- mitigation measures and timeframe for their implementation in case of non-compliances with the emission limits referred; and
- a program to monitor the ongoing performance of the development.

The AQMP has been prepared in accordance with requirements defined in the Environmental Protection Licence (**Attachment 1**) and Development Consent (**Attachment 2**), and most recently updated to reflect amended operating, monitoring and verification conditions introduced via EPL Variation in relation to pharmaceutical and illicit drug waste processing.

This AQMP update should also be read in conjunction with the following documents:

- Post-Commissioning Proof of Performance Air Emissions Sampling Plan (PCPPAESP; Weston Aluminium, 2019), which forms part of the Pre-Construction Design Report – Thermal Waste Processing Plant (Advanced Combustion Engineering, 2019); and
- Bypass Stack Management Plan (AECOM, 2020), which forms part of the updated Operational Environmental Management Plan (AECOM, 2020).

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	9 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

2. RESPONSIBILITIES

2.1 AQMP Control and Record of Revision


This AQMP is maintained by the Environmental Management Representatives (EMR), which is currently the Environment & Sustainability Manager. The originals of all pages of this Manual shall be in the keeping of the Projects and Environment Manager, the final authority on the Manual content and approving any changes or updates.

2.2 Maintenance of Air Quality Systems

Maintenance systems are developed for all site pollution control and monitoring equipment. Maintenance of the air quality monitoring systems at the Kurri Kurri premises is the responsibility of the Maintenance Department, as supervised by the Maintenance Manager. General tasks may include the following:

- Scheduling of proactive, routine and corrective maintenance works within the Maintenance Management System (utilising MEX database software, or equivalent). These tasks include routine inspections (mechanical and electrical), routine servicing (mechanical, electrical, greasing), fabric filter replacements, servicing of scrubber dosing systems, component replacements, sensor alignments, calibrations, etc.);
- Purchasing of goods and services relating to maintenance activities. This includes the purchase of premium hydrated lime, activated carbon, fabric filters, PLC software updates, etc.;
- Inspection, supervision and implementation of tasks;
- Staff communication and training in regards to system maintenance, operations and modifications/upgrades;
- Performance assessment (in conjunction with routine emission testing and Supplier filter checks, as required); and
- Internal recording/reporting.


Specific tasks relating to the maintenance of the air quality systems are defined in **Section 6**.

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	10 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

2.3 Coordination of Monitoring and Reporting

Scheduling and coordination of routine regulatory compliance air emission monitoring by suitably qualified consultants is the responsibility of the EMR. The EMR is also responsible for the internal and external reporting of air quality monitoring findings. External consultants may be engaged, from time to time, to prepare reports (e.g. National Pollutant Inventory reporting) on the behalf of Weston Aluminium.

The EMR will periodically assess the monitoring and reporting systems for their completeness and accuracy. The EMR may seek the assistance of external consultancy support, if required.

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	11 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

3. AIR QUALITY CONTROL SYSTEMS OVERVIEW

Weston Aluminium operates and maintains a number of best-practice environmental controls to ensure compliance with air quality emission standards established by the EPA. These systems and controls relate to the management and monitoring of process air emissions associated with material receipt/storage, metal furnace and thermal treatment operations, and ash handling circuits.

A description of the air quality emission control systems is described in **Table 1**. The locations of air emission discharge points are illustrated in **Figure 1**.

Table 1: Description of Air Emission Control Systems and Discharge Point Sources

Emission Discharge Point	Emission Control System	Plant Process Serviced	Coordinates ^{*1}	
			E (km)	N (km)
Stack 1 (EPL Point 1)	Wet-Dry Lime-fed Scrubber and Fabric Filter Baghouse No. 1 ^{*2 *3}	No. 2 Rotary Furnace	357.263	6369.323
Stack 1 (EPL Point 13)	Wet-Dry Lime-fed Scrubber and Fabric Filter Baghouse No. 1 ^{*2 *3}	Charging / Side Well of the Reverb Furnace ^{*2}	357.263	6369.323
Stack 2 (EPL Point 2)	Decommissioned and removed in response to the November 2021 fire. Formerly serviced Dross Storage Bays. May be reinstated in future if operationally required.			
Stack 3 (EPL Point 3)	Decommissioned and removed in response to the November 2021 fire. Formerly serviced MRM, Cooler and Screens. May be reinstated in future if operationally required.			
Stack 4 (EPL Point 4)	Fabric Filter Baghouse No. 4 ^{*3}	Metal Reclaiming Machine, Cooler and Screens	357.313	6369.295
Stack 5 (EPL Point 17)	Dry Lime and Activated Carbon fed Scrubber and Fabric Filter Baghouse No. 5	Thermal Processing Facility	357.348	6369.348
Stack 6 (EPL Point 14)	Direct vent of clean combustion gases to atmosphere	Holding Side of the Reveratory Furnace	357.300	6369.324
Stack 7 (EPL Point 18)	Fabric Filter Baghouse No. 7	Dross Storage Bays (Aldex Building)	357.326	6369.227
Stack 8 (EPL Point 16)	By-pass Stack (direct vent to atmosphere)	Thermal Processing Facility (Emergency Upset Conditions)	357.335	6369.361
Notes: ^{*1} Coordinates sourced from Google Earth. Datum: MGA ^{*2} The Reveratory Furnace and Rotary Furnace No. 2 are not to be operated concurrently ^{*3} Upgraded / replaced following the Nov 2021 premises fire and/or in response to Mod 14 Project Approval				

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	12 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

4. AIR QUALITY MONITORING PROGRAMS

Air quality monitoring is performed to validate and assess the ongoing performance of air emission systems and controls associated with the entire development. This process allows Weston Aluminium to measure and monitor its operations and activities in relation to potential environmental impact. The process also allows performance tracking and progress in meeting the goals, environmental objectives and required targets defined in the IMS.

Monitoring and measurement will include:

- appropriate and applicable equipment and procedures used to provide measurable, verifiable and reproducible results against which compliance with environmental requirements can be assessed;
- keeping of appropriate records of maintenance activities (routine, preventative and breakdown) and of assessment measurements conducted;
- review of results at operational (including training/resources) and management level to enable continuous improvement; and
- transmission of such results to the EMR in a form suitable for internal and external reporting.

Air quality monitoring requirements for Weston Aluminium's conventional operations are principally defined in the facility's Environmental Protection Licence (**Attachment 1**) and are outlined below in **Section 4.1**.

Monitoring requirements associated with the post-commissioning and operational phases of the new TPF development, as defined in **Attachment 1**, are outlined in **Sections 4.2** and **4.3** respectively.

4.1 Conventional Operations

The frequency of air emissions monitoring and approved testing methodologies are prescribed in Condition M2 of the EPL. A summary of these requirements is presented in **Table 2**.

Note: Weston Aluminium is also required to undertake air quality monitoring for Load Based Licencing requirements (in accordance with Condition L2.2 of the EPL) and for National Pollutant Inventory reporting requirements. These additional testing requirements are also incorporated into **Table 2**.


 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	13 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

Table 2: Air Emissions Monitoring Requirements – Conventional Operations

Emission Discharge Point	Emission Parameter	Monitoring Frequency	Approved Testing Method
Stack 1 (Rotary Furnace No. 2 operation) – <i>dross or SPL processing (with or without non-liquid pharma / drug waste processing)</i>	Cadmium	Refer Note 1	TM-14
	Carbon monoxide	Refer Note 1	TM-32
	Gaseous fluoride	Continuous	Continuous monitor
	Hydrogen chloride	Refer Note 1	TM-7 & TM-8
	Moisture	Refer Note 1	TM-22
	Molecular weight of stack gases	Refer Note 1	TM-23
	Nitrogen oxides	Refer Note 1	TM-11
	Oxygen	Refer Note 1	TM-25
	Solid particles	Refer Note 1	TM-15
	Sulfuric acid mist and sulfur trioxide (as SO ₃)	Refer Note 1	TM-3
	Temperature	Refer Note 1	TM-2
	Type 1 and 2 substances in aggregate	Refer Note 1	TM-12, TM-13 & TM-14
	Velocity	Refer Note 1	TM-2
	Volumetric flowrate	Refer Note 1	TM-2
	Fine particulates (PM ₁₀)	Annual	OM-5
	Particulate fluoride	Annual	TM-10
	Volatile organic compounds	Annual	OM-2
	Polycyclic Aromatic Hydrocarbons	Annual	OM-26
Stack 1 (Reverb Furnace operation)	Dioxins and furans	Refer Note 1	TM-18
	Cyanide	Refer Note 1	USEPA OTM-29
	Cadmium	Annual	TM-14
	Dioxins & furans	Every 6 months	TM-18
	Fluoride	Annual	TM-10
	Hydrogen chloride	Annual	TM-7 & TM-8
	Nitrogen oxides	Annual	TM-11
	Solid particles	Annual	TM-15
	Sulfuric acid mist and sulfur trioxide	Annual	TM-3
	Type 1 and 2 substances in aggregate	Annual	TM-12, TM-13 & TM-14
	Volatile organic compounds	Annual	OM-2
	Velocity	Every 6 months	TM-2
	Dry gas density	Every 6 months	TM-23
	Moisture	Annual	TM-22
	Oxygen	Every 6 months	TM-25
	Temperature	Annual	TM-2
	Volumetric flowrate	Every 6 months	TM-2
	Fine particulates (PM ₁₀)	Annual	OM-5
	Polycyclic Aromatic Hydrocarbons	Annual	OM-26


 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	14 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

Table 2: Continued

Emission Discharge Point	Emission Parameter	Monitoring Frequency	Approved Testing Method
Stack 2 ^{*2}	Solid Particles	Annual	TM-15
	Fine particulates (PM ₁₀)	Annual	OM-5
	Fluorides	Annual	TM-10
Stack 3 ^{*2}	Solid Particles	Annual	TM-15
	Fine particulates (PM ₁₀)	Annual	OM-5
	Fluorides	Annual	TM-10
Stack 4	Solid Particles	Annual	TM-15
	Fine particulates (PM ₁₀)	Annual	OM-5
	Fluorides	Annual	TM-10
Stack 6	Carbon monoxide	Annual	OM-1
	Dry gas density	Annual	TM-23
	Moisture	Annual	TM-22
	Nitrogen oxides	Annual	TM-11
	Oxygen	Annual	TM-25
	Solid particles	Annual	TM-15
	Temperature	Annual	TM-2
	Velocity	Annual	TM-2
	Volumetric flow rate	Annual	TM-2
	Fine particulates (PM ₁₀)	Annual	OM-5
	Fluorides	Annual	TM-10
	Sulfuric acid mist and sulfur trioxide	Annual	TM-3
	Volatile organic compounds	Annual	OM-2
	Polycyclic Aromatic Hydrocarbons	Annual	OM-26
Stack 7	Solid particles	Annual	TM-15
	Fine particulates (PM ₁₀)	Annual	OM-5
Note: ^{*1} Collection of samples (i) yearly, during the processing of aluminium dross and/or SPL, or the co-processing of aluminium dross and/or SPL with non-liquid pharma/illicit drug wastes AND ii) twice yearly during the processing of liquid pharmaceutical waste and/or illicit drug waste (<i>i.e. for a total of 3 rounds of testing required at least in the first year; frequency to be reviewed by EPA following the initial 12 months of liquid waste processing</i>) ^{*2} Monitoring only required if emission source reinstated in future			

4.2 TPF – Post-Commissioning Phase

In accordance with EPA requirements (**Attachment 1**), and within 3-months of project commissioning (anticipated mid-2023), Weston Aluminium is required to undertake air emissions monitoring and prepare a Post Commissioning Air Emissions Verification Report (PCAEVR) to validate air emissions performance of the Thermal Waste Treatment Plant.


 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	15 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

The PCAEVR is to include the following:

- Air emissions sampling results for the thermal treatment plant obtained in accordance with the PCPPAESP;
- Comparison of the emission sampling results against the discharge limits for the thermal treatment plant specified in the Environmental Protection Licence for the site (refer **Section 5.2**);
- Detailed evaluation of potential off-site impacts based on measured emission concentrations and rates; and
- Proposed approach, including timeframe for implementation, to resolve any non-compliances with Environment Protection Licence limits and the *Protection of the Environment Operations (Clean Air) Regulation 2010*.

The post-commissioning air emissions monitoring program has been designed in consultation with the EPA to capture process inputs that represent ‘worst-case’ waste processing with respect to potential air pollutant generation. This design has been based on the nature and variability of discrete waste inputs, and their proportion within process feedstock blends. Process waste inputs may be broadly categorised into three dominant groups described below (waste codes also defined where applicable):

- **Medical Waste** – including clinical and related wastes (R100), pathogenic substances (R110), waste pharmaceuticals, drugs and medicines (R120), cytotoxic substances (R130), and wastes from the production, preparation and use of pharmaceutical products (R140). Such wastes may include fluids, anatomical wastes, residues from surgical activities, and pharmaceutical product and/or manufacturing wastes (either bulk or in original packaging). Such process inputs tend to be variable in nature, and inclusive of associated packaging items which must also be thermally-treated in NSW, including glass, cardboard, aluminium foil (e.g. blister packs) and plastics (e.g. shrink wrapping, bottles/vials and blister packs; which may also contain PVC). These wastes are readily combustible, and typically yield 5 - 10% w/w residual ash. Due to the variable nature of these wastes, potential presence of heavy metals and PVC, these inputs are considered to represent worst-case with respect to emissions generation (Note: earlier air dispersion and impact assessments for the Project were developed in conjunction with the EPA on this basis); and
- **Other Waste** – may include solvents and paints, pitch sludge residues, oily rags and confidential documents. These wastes contain either flammable or readily combustible constituents and typically yield negligible ash residues.

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	16 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

Following consultation with the EPA, WA concurs with a 90% Medical Waste and 10% 'Other Waste' blend effectively representing 'worst case' with respect to potential air emissions. This is generally consistent with the air quality impact assessment approach undertaken during the planning and assessment phase of the Development.


Accordingly, and per agreement with the EPA, three (3) discrete Stack 5 air emissions monitoring events are proposed for the post-commissioning testing program involving this 'worst-case' feedstock blend, each of which are to be processed under normal operating conditions, and for the duration of testing. Comprehensive air emissions testing will be performed during each event. The air emissions sampling plan proposed for post-commissioning testing and verification is summarised in **Table 3**.

Table 3: TPF Post-Commissioning Air Emissions Monitoring Scope – Stack 5

Monitoring Parameter	Waste Input (w/w)	Proposed Testing Method
Sampling position	Medical: 90 % Other 10% *1 Rate: 800 kg/hr	TM-1
Dioxins or furans		TM-18
Hydrogen chloride		TM-8
Nitrogen oxides		TM-11
Solid particles		TM-15
Sulfuric acid mist and sulphur trioxide		TM-3
Sulfur dioxide		TM-4
Type I and II substances (metals)		TM-12, TM-13 & TM-14
Volatile organic compounds		TM-34
Velocity		TM-2
Dry gas density		TM-23
Moisture		TM-22
Temperature		TM-2
Oxygen		TM-25
Carbon Monoxide		TM-32
Volumetric flow rate		TM-2
Notes: *1 'Other' waste may include oily rags, pitch sludge residue, solvents and paints, and confidential documents		

4.3 TPF – Operational Phase

The frequency of air emissions monitoring and approved testing methodologies during the TPF operational phase are prescribed in the EPL (refer **Attachment 1**). A summary of these requirements is presented in **Table 4**.

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	17 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

Note: For those parameters required to be monitored continuously (carbon monoxide, hydrogen chloride, solid particles, and flow characteristics), Weston Aluminium may also elect to undertake testing by conventional methods as a means to further validate continuous methodologies. These additional testing requirements are also incorporated into **Table 4**.

Note: Weston Aluminium is also required to undertake air quality monitoring for Load Based Licencing requirements (in accordance with Condition L2.2 of the EPL) and for National Pollutant Inventory reporting requirements. These additional testing requirements are also incorporated into **Table 4**.


In conjunction with the EPA, WA intends to review the suitability of monitoring frequencies on an ongoing basis, and to seek variation to monitoring frequency with the NSW EPA based on air emissions control performance.

Table 4: TPF Operational-Phase Air Emissions Monitoring Scope – Stack 5 (EPL Point 17)

Emission Parameter	Monitoring Frequency	Approved Testing Method
Dioxins & furans	Quarterly	TM-18
Hydrogen chloride	Continuous	PS-18 & TM-8
Nitrogen oxides	Quarterly	TM-11
Solid particles	Continuous	PS-11 & TM-15
Sulfuric acid mist and sulphur trioxide	Quarterly	TM-3
Sulfur dioxide	Quarterly	TM-4
Type I and II substances (metals) ^{*1}	Quarterly	TM-12, TM-13 & TM-14
Volatile organic compounds	Quarterly	TM-34
Velocity	Continuous	CEM-6 & TM-2
Dry gas density	Quarterly	TM-23
Moisture	Quarterly	TM-22
Temperature	Continuous	CEM-6 & TM-2
Oxygen	Continuous	CEM-3 & TM-25
Carbon Monoxide	Continuous	CEM-4 & TM-32
Volumetric flow rate	Continuous	CEM-6 & TM-2
Fluorides	Annual	TM-10
Fine particulates (PM ₁₀)	Annual	OM-5
Polycyclic Aromatic Hydrocarbons	Annual	OM-26
Notes: ^{*1} Inclusive of cadmium and mercury		

4.4 Testing Certification

Air emissions monitoring and sample analyses are to be performed by competent organisations. Copies of accreditation certificates are to be provided to Weston Aluminium for our file. All analytical reports are to include proof of NATA certification.

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	18 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

4.5 Continuous In-Stack Emission Monitoring

In accordance with regulatory Approvals, Weston Aluminium is required to continuously monitor gaseous fluoride (Neogas Laser sensor; Stack 1) and solid particulate emissions (PCME sensors; all stacks excluding Stack 6). Such systems are required for process feedback and control requirements, demonstration of compliance and regulatory reporting purposes. The EMR is responsible for the maintenance, calibration and data management requirements for these systems.

Furthermore, Weston Aluminium is required to operate and maintain real-time, continuous monitoring of flow conditions (temperature, velocity and flow rate), oxygen, carbon monoxide, hydrogen chloride and solid particle concentrations associated with Stack 5 exhaust during Thermal Waste Treatment Plant operations (per SSD 7396). These systems, in conjunction with routine conventional air emissions monitoring events, are to be employed for demonstration of compliance and regulatory reporting purposes.

Additionally, Weston Aluminium also operate and maintain process-based temperature, oxygen and carbon monoxide real-time monitoring systems at the exit of the Secondary Chamber. Such systems are required for process feedback and process control.


CEMS maintenance and calibrations will be performed in accordance with manufacturer's specifications, and at manufacturer-defined frequencies. Certified Reference Gases will be employed for gas analyser calibration checks and recalibration events, where required. Records relating to Reference Gases and calibration events/servicing will be maintained in accordance with WA's IMS documentation requirements.

The EMR is responsible for the maintenance, calibration and data management requirements for these systems, which will be undertaken using a combination of internal Maintenance Department resources and external third-party maintenance / servicing/calibration support.

4.6 Pollution Studies and Reduction Programs

From time-to-time, Weston Aluminium may be required to undertake investigations or modifications to plant equipment and/or processes to ensure ongoing regulatory compliance and/or to demonstrate continuous improvement. These activities are defined by the EPA and included within Weston Aluminium's EPL as Pollution Studies and Reduction Programs (PRPs).

Weston is committed to conducting such PRPs in conjunction with the EPA, and within the timeframes negotiated. PRPs, if applicable, are included within the EPL (**Attachment 1**).

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	19 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

5. COMPLIANCE ASSESSMENT

Air emission load and concentration compliance limits prescribed for Weston Aluminium's Kurri Kurri facility are defined in **Sections 5.1** and **5.2** respectively.

5.1 Emission Load Limits

Total annual air emission load limits are defined in Condition L2 of the EPL. These limits are summarised in **Table 5**.

Table 5: Air Emission Load Limits

Assessable Pollutant	Load Limit (kg)
Arsenic	
Benzene	
Benzo(a)pyrene (equivalent)	
Coarse Particulates	8,768
Fine Particulates	5,099
Fluoride	865
Lead	
Mercury	
Nitrogen Oxides	20,481
Sulfur Oxides	16,986
Volatile Organic Compounds	2,436

In addition, Weston Aluminium is required to comply with hourly load limits prescribed in EPL Conditions L3.4 – 3.6, as reproduced below:

- Condition L3.4 The concentration of gaseous fluoride emitted to the atmosphere from Point 1 must not exceed 1.4 milligrams per cubic metre of fluoride, measured as a one hour average.
- Condition L3.5 Total plant gaseous fluoride emissions must not exceed 0.25kg/hr.
- Condition L3.6 Total plant particulate emissions must not exceed 5.43 kg/hr.

5.2 Emission Concentration Limits

Discharge air emission concentration limits for conventional operations are defined in Condition L3.4 of the EPL. These limits are summarised in **Table 6**. Concentration limits associated with Thermal Processing Facility (TPF) operation are presented in **Table 7**.


 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	20 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

Table 6: Air Emission Concentration Limits – Conventional Operations

Emission Discharge Point	Emission Parameter	Units	Emission Limit	Averaging Period
Stack 1 (Rotary Furnace No. 2 operation)	Carbon monoxide	mg/m ³	125	1 hour rolling
	Cyanide	mg/m ³	0.8	1 hour ^{*1}
	Gaseous fluoride	mg/m ³	2	1 hour ^{*1}
	Hydrogen chloride	mg/m ³	50	1 hour ^{*1}
	Nitrogen oxides	mg/m ³	200	1 hour block
	Solid particles	mg/m ³	25	1 hour ^{*1}
	Sulfuric acid mist and sulfur trioxide	mg/m ³	30	1 hour ^{*1}
	Type 1 and 2 substances in aggregate	mg/m ³	1	1 hour ^{*1}
	Dioxins and furans	ng/m ³	0.1	2 hours
	Cadmium	mg/m ³	0.02	1 hour
Stack 1 (Reverb Furnace operation)	Dioxins & furans	ng/m ³	0.1	2 hours
	Hydrogen chloride	mg/m ³	10	1 hour ^{*1}
	Nitrogen oxides	mg/m ³	100	1 hour block
	Solid particles	mg/m ³	10	1 hour ^{*1}
	Sulfuric acid mist and sulfur trioxide	mg/m ³	30	1 hour ^{*1}
	Type 1 and 2 substances in aggregate	mg/m ³	1	1 hour ^{*1}
	Volatile organic compounds	mg/m ³	77	1 hour rolling
	Carbon monoxide	mg/m ³	125	1 hour rolling
	Cadmium	mg/m ³	0.02	1 hour ^{*1}
Stack 2	Solid Particles	mg/m ³	35	1 hour ^{*1}
Stack 3	Solid Particles	mg/m ³	50	1 hour ^{*1}
Stack 4	Solid Particles	mg/m ³	24	1 hour ^{*1}
Stack 6	Solid particles	mg/m ³	10 ^{*2}	1 hour ^{*1}
Stack 7	Solid particles	mg/m ³	15	1 hour ^{*1}
Notes: ^{*1} 1 hour, or the minimum sampling period specified in the relevant test method referred to in Part 1 Division 1 of the Protection of the Environment Operations (Clean Air) Regulation 2022, whichever is the greater. ^{*2} Limit value expressed at 15% O ₂ correction (dry, 273 K, 101.3 kPa). Unless otherwise defined, emissions concentration limits are expressed at dry, 273 K, 101.3 kPa conditions.				



 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	21 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

Table 7: Air Emission Concentration Limits – Stack 5 (TPF Operation)

Emission Parameter	Units	Emission Limit	Averaging Period
Volatile organic compounds	mg/m ³	20 ^{*1}	1 hour rolling
Hydrogen chloride	mg/m ³	50	1 hour ^{*2}
Solid particles	mg/m ³	20	1 hour ^{*2}
Sulfuric acid mist and/or sulfur trioxide	mg/m ³	80	1 hour ^{*2}
Type 1 and 2 substances (in aggregate)	mg/m ³	1.0	1 hour ^{*2}
Cadmium	mg/m ³	0.18	1 hour ^{*2}
Mercury	mg/m ³	0.2	1 hour ^{*2}
Nitrogen oxides (as NO ₂ equivalent)	mg/m ³	200	1 hour block
Dioxins or furans	ng/m ³	0.1	2 hours
Carbon monoxide	mg/m ³	62.5	1 hour rolling
Sulfur dioxide	mg/m ³	200	1 hour block
Notes: All limits are 100 percentile concentration limits, and expressed at dry, 273 K, 101.3 kPa and 11% O ₂ conditions ^{*1} The EPA intends to review the concentration limit for volatile organic compounds based on test results from the post commissioning verification report ^{*2} 1 hour, or the minimum sampling period specified in the relevant test method referred to in Part 1 Division 1 of the Protection of the Environment Operations (Clean Air) Regulation 2022, whichever is the greater.			

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	22 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

6. MAINTENANCE AND MITIGATION MEASURES

Weston Aluminium have systems in place to identify, investigate, report and correct a non-conformance (actual or potential), and to implement appropriate preventative and corrective actions, where required. The corrective or preventative action undertaken to eliminate the actual or potential air quality non-conformance situations shall be appropriate to the magnitude of the environmental impact encountered.

The EMR is responsible for developing and maintaining procedures for identifying, investigating and correcting actual or potential non-conformance situations. The EMR will assess and report such non-conformances to the appropriate authority and initiate follow up action in accordance with EPL requirements. The EMR will periodically assess the adequacy of the non-conformance assessment and reporting process.

Weston Aluminium strives to manage and operate its facilities in such a way as to maintain a high level of pollution control performance, thus proactively mitigating the likelihood of an actual or potential non-conformance. An overview of the routine and preventative actions relating specifically to air emissions management is listed in **Table 8**. Applicable timeframes and Departments/staff responsible for their implementation are also tabulated.


	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	23 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

Table 8: Mitigation Measures and Implementation Timeframes to Ensure Compliance with Regulatory Requirements

Emission Pollutant	Mitigation Measure	Implementation Timeframe/ Routine Frequency	Person / Department Responsible
General	<ul style="list-style-type: none"> Lubrication (including electric motors, bearings) Electrical inspection (including control panels, cables, motors, limits, sensors, scrubber media level detectors, PLC performance checks) Continuous Emissions Monitoring System general inspection Continuous Emissions Monitoring System maintenance checks and servicing Continuous Emissions Monitoring System calibration checks / re-calibration CEMS monitor alarms CEMS monitor data log download and back-up CEMS sensor clean & inspection Mechanical inspection (including gauges & tubing, baghouse shell, ductwork, fan mountings, walkways, fan belts, impellers, lids, door seals, drive pulleys, dump valves, regulators, manifold air pressures, solenoids) 	<ul style="list-style-type: none"> Weekly Monthly Weekly Per manuf. requirements Per manuf. requirements Continuous Monthly Per manuf. Requirements 3-monthly 	<ul style="list-style-type: none"> Maintenance Dept Maintenance Dept Maintenance Dept Contractor Contractor EMR EMR EMR / Contractor Maintenance Dept
Solid Particulates and adsorbed pollutants, including: <ul style="list-style-type: none"> Heavy metals Semi-volatile organics 	<ul style="list-style-type: none"> Pulsing system & cycles inspection Fabric filter inspection (& discrete bag replacement, as required) Fabric filter replacement Scrubber media dosing system inspection (& repair, as required) Baghouse pulsing cycle Differential pressure check & manual pulse Pulsing cycle & differential pressure check 	<ul style="list-style-type: none"> Weekly 6-Monthly (& as req'd) 18-24 mths (or as req'd) Monthly (& as req'd) Automated As required 6-monthly 	<ul style="list-style-type: none"> Maintenance Dept Maintenance Dept Contractor Maintenance Dept Maintenance Dept Operations Dept Maintenance Dept



 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	24 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

Table 8: Mitigation Measures and Implementation Timeframes to Ensure Compliance with Regulatory Requirements (continued).

Emission Pollutant	Mitigation Measure	Implementation Timeframe/ Routine Frequency	Person /Department Responsible
Organics, including: <ul style="list-style-type: none"> Dioxins and furans Polycyclic aromatic hydrocarbons Volatile organic hydrocarbons 	<ul style="list-style-type: none"> Scrubber media silo / bag capacity check Scrubber media delivery Scrubber media quality check Scrubber media dosing PLC & delivery system check Baghouse pulsing cycle Differential pressure check & manual pulse Pulsing cycle & differential pressure check Mains gas regulator and filter check Main burner regulation Main burner : combustion air tuning and optimisation 	<ul style="list-style-type: none"> Daily As required Per delivery basis Monthly Automated As required 6-monthly 6-monthly Automated 6-monthly 	<ul style="list-style-type: none"> Operations Dept EMR EMR Maintenance Dept Maintenance Dept Operations Dept Maintenance Dept Maintenance Dept Maintenance Dept Contractor
Other Gaseous Pollutants, including: <ul style="list-style-type: none"> Hydrogen chloride Gaseous fluoride Low-boiling point heavy metals Carbon monoxide Oxides of sulfur Oxides of nitrogen 	<ul style="list-style-type: none"> Scrubber media silo / bag capacity check Scrubber media delivery Scrubber media quality check Scrubber media dosing PLC & delivery system check Baghouse pulsing cycle Differential pressure check & manual pulse Pulsing cycle & differential pressure check Mains gas regulator and filter check Main burner regulation Main burner : combustion air tuning and optimisation 	<ul style="list-style-type: none"> Daily As required Per delivery Monthly Automated As required 6-monthly 6-monthly Automated 6-monthly 	<ul style="list-style-type: none"> Operations Dept Stores Dept EMR Maintenance Dept Maintenance Dept Operations Dept Maintenance Dept Maintenance Dept Maintenance Dept Contractor

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	25 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

7. RECORDS AND REPORTING

7.1 Record Maintenance

The EMR is responsible for maintaining all data and air quality monitoring reports. Summary data is to be collated by the EMR within the in-house summary spreadsheets to support Annual Returns, Load-Based Licencing reporting, National Pollutant Inventory submissions, Clean Energy Regulator (National Greenhouse and Energy Reporting) requirements and other internal and regulatory reporting that may be required from time to time.

All records, data and reports are to be maintained for a minimum of four (7) years.

Records of Maintenance works and activities (scheduled routine, preventative and corrective) are to be maintained in electronic format within the MEX maintenance database.


Input and support may be sought from appropriate groups, including, Administration, Environmental Consultants and external legal counsel.

The identification, maintenance, archival and disposal of environmental records is also defined in the IMS.

7.2 Reporting


The preparation of external regulatory reporting is the responsibility of the EMR. Annual Returns, Load-Based Licensing, National Pollutant Inventory, National Greenhouse Gas and Energy Reports and other related reports are required to be submitted to the applicable regulatory authority within the required timeframe. Specific reporting deadlines are defined below.

- Annual Return: annually to EPA, within 60 days from EPL anniversary (19 December); and
- Load-Based Licensing: annually, to support Annual Return;
- National Pollutant Inventory: annually to Department of Sustainability, Environment, Water, Population and Communities, by 30 September;
- National Greenhouse and Energy Report: annually to Clean Energy Regulator via the online reporting system, Emissions & Energy Reporting System, by 31 October;
- Post Commissioning Verification Monitoring and Report submission: submission to NSW EPA within 3 months of commissioning the Thermal Waste Treatment Plant; and
- Pharmaceutical and illicit drug waste processing emission report: submission to NSW EPA in relation to the first round emission testing to be performed within 6 weeks of

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	26 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

first processing pharmaceutical and illicit drug wastes. Timeline for report submission not defined.

The EMR is also responsible for the preparation of air quality performance reports for internal reporting and reporting to the Board of Directors, as may be required from time to time.

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	27 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

8. MANAGEMENT REVIEW

The EMR is to implement a management process for ongoing review of the suitability, adequacy and effectiveness of the Weston Aluminium Air Quality Management Program and Proof of Performance Air Emissions Sampling Plan. The management review process shall ensure that necessary information is compiled to allow for a proper management review, such as:

- air emissions monitoring results;
- corrective action results;
- change in business environment that may influence Environmental Policy, objectives and targets;
- new, revised, or impending environmental legislation;
- new or changed stakeholder or interested party expectations;
- changes in applicable technology (process, pollution control);
- organisation's financial and competitive position;
- incidents; and
- non-conformances.

The EMR will undertake a review and update of this Air Quality Monitoring Program on a 24-month basis or following variation to air emissions monitoring conditions defined in the Environmental Protection Licence and/or Development Consent, as required. Amendment of the Program will also capture changes in Weston Aluminium operations and activities as they occur, with the aim of tracking progress in fulfilling Environmental Policy goals, set objectives and targets.

The Management Review is to be performed and documented. The reviews are to be conducted at the intervals defined above, or as determined by Weston Aluminium Board Management to ensure that the Program is:

- suitable in its current form;
- adequate for possible future developments (technical, legislative); and
- effective in managing the environmental impacts.


 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	28 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

FIGURE 1

Legend

- Premise boundary
- Cadastral boundary
- Easement

EPL Locations

- Monitoring Location


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 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	29 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

ATTACHMENT 1



Environment Protection Licence

Licence - 6423

Licence Details	
Number:	6423
Anniversary Date:	19-December

Licensee	
WESTON ALUMINIUM PTY LIMITED	
PO BOX 295	
KURRI KURRI NSW 2327	

Premises	
WESTON ALUMINIUM	
129 MITCHELL AVENUE	
KURRI KURRI NSW 2327	

Scheduled Activity	
Metallurgical activities	
Resource recovery	
Waste disposal (thermal treatment)	
Waste storage	

Fee Based Activity	Scale
Aluminium production (scrap metal)	> 10000 T annual production capacity
Recovery of hazardous and other waste	Any hazardous and other waste recovered
Scrap metal processing	0-100000 T annual production capacity
Thermal treatment of general waste	Any capacity
Thermal treatment of hazardous and other waste	Any capacity
Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Any listed waste type stored



Environment Protection Licence

Licence - 6423

Contact Us
NSW EPA
6 Parramatta Square
10 Darcy Street
PARRAMATTA NSW 2150
Phone: 131 555
Email: info@epa.nsw.gov.au
Locked Bag 5022
PARRAMATTA NSW 2124



Environment Protection Licence

Licence - 6423

INFORMATION ABOUT THIS LICENCE	5
Dictionary	5
Responsibilities of licensee	5
Variation of licence conditions	5
Duration of licence	5
Licence review	5
Fees and annual return to be sent to the EPA	5
Transfer of licence	6
Public register and access to monitoring data	6
1 ADMINISTRATIVE CONDITIONS	7
A1 What the licence authorises and regulates	7
A2 Premises or plant to which this licence applies	7
A3 Information supplied to the EPA	7
2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND	8
P1 Location of monitoring/discharge points and areas	8
3 LIMIT CONDITIONS	9
L1 Pollution of waters	9
L2 Load limits	9
L3 Concentration limits	10
L4 Waste	13
L5 Noise limits	17
L6 Potentially offensive odour	17
L7 Other limit conditions	17
4 OPERATING CONDITIONS	18
O1 Activities must be carried out in a competent manner	18
O2 Maintenance of plant and equipment	18
O3 Dust	18
O4 Processes and management	18
O5 Waste management	18
O6 Other operating conditions	19
5 MONITORING AND RECORDING CONDITIONS	20
M1 Monitoring records	20
M2 Requirement to monitor concentration of pollutants discharged	21
M3 Testing methods - concentration limits	25
M4 Testing methods - load limits	25



Environment Protection Licence

Licence - 6423

M5	Recording of pollution complaints	25
M6	Telephone complaints line	26
6	REPORTING CONDITIONS	26
R1	Annual return documents	26
R2	Notification of environmental harm	27
R3	Written report	27
R4	Other reporting conditions	28
7	GENERAL CONDITIONS	29
G1	Copy of licence kept at the premises or plant	29
G2	Contact number for incidents and responsible employees	29
G3	Other general conditions	29
8	SPECIAL CONDITIONS	31
E1	Compliance audit	34
E2	Thermal Processing Facility (SSD7396)	34
E3	No. 2 Rotary Furnace - Processing of pharmaceutical and illicit drug waste	32
DICTIONARY		33
	General Dictionary	33

Environment Protection Licence

Licence - 6423

Information about this licence

Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).



Environment Protection Licence

Licence - 6423

The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

This licence is issued to:

WESTON ALUMINIUM PTY LIMITED
PO BOX 295
KURRI KURRI NSW 2327

subject to the conditions which follow.



Environment Protection Licence

Licence - 6423

1 Administrative Conditions

A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Metallurgical activities	Aluminium production (scrap metal)	> 10000 T annual production capacity
Resource recovery	Recovery of hazardous and other waste	Any hazardous and other waste recovered
Metallurgical activities	Scrap metal processing	0 - 100000 T annual production capacity
Waste disposal (thermal treatment)	Thermal treatment of general waste	Any capacity
Waste disposal (thermal treatment)	Thermal treatment of hazardous and other waste	Any capacity
Waste storage	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Any listed waste type stored

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
WESTON ALUMINIUM
129 MITCHELL AVENUE
KURRI KURRI
NSW 2327
LOT 2; DP 1267615.

A3 Information supplied to the EPA

A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

- a) the applications for any licences (including former pollution control approvals) which this licence replaces



Environment Protection Licence

Licence - 6423

under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

A3.2 Any other document and/or management plan is not to be taken as part of the documentation in condition A3.1, other than those documents and/or management plans specifically referenced in this licence.

2 Discharges to Air and Water and Applications to Land

P1 Location of monitoring/discharge points and areas

P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

Air			
EPA identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Wet-Dry Lime-Fed Scrubber and Fabric Filter Baghouse No. 1 (servicing the No. 2 Rotary Furnace), marked and shown as "Stack 1" on the "EPA Monitoring Locations Plan".
2	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Fabric Filter Baghouse No. 2 (servicing the Dross Storage Bays), marked and shown as "Stack 2" on the "EPA Monitoring Locations Plan".
3	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Fabric Filter Baghouse No. 3 (servicing the Metal Reclaiming Machine, Cooler and Screens), marked and shown as "Stack 3" on the "EPA Monitoring Locations Plan".
4	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Fabric Filter Baghouse No. 4 (servicing the Metal Reclaiming Machine, Cooler and Screens), marked and shown as "Stack 4" on the "EPA Monitoring Locations Plan".
13	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Wet-Dry Lime-Fed Scrubber and Fabric Filter Baghouse No. 1 (servicing the Charging/Side Well of the Reverberatory Furnace), marked and shown as "Stack 1" on the "EPA Monitoring Locations Plan".
14	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Direct vent of clean combustion gases (servicing the Holding Side of the Reverberatory Furnace), marked and shown as "Stack 6" on the "EPA Monitoring Locations Plan".
16		Discharge to air	By-pass Stack (servicing the Thermal Waste Treatment Plant), marked and shown as "Stack 8" on the "EPA Monitoring Locations Plan".



Environment Protection Licence

Licence - 6423

17	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Dry Lime and Activated Carbon Fed Scrubber and Fabric Filter Baghouse No. 5 (servicing the Thermal Waste Treatment Plant), marked and shown as "Stack 5" on the "EPA Monitoring Locations Plan".
18	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Fabric Filter Baghouse No. 7 (servicing the Pre-Processing Plant, Dross Storage Bays (Aldex Building)), marked and shown as "Stack 7" on the "EPA Monitoring Locations Plan".

P1.2 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

P1.3 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

Water and land

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
12	Stormwater quality monitoring		Discharge from the first flush dam marked and shown as "Main Pond" on the "EPA Monitoring Locations Plan".

P1.4 For the purpose of the tables above, "EPA Monitoring Location Plan" refers to the plan titled "EPA Monitoring Locations", prepared by AECOM Australia Pty Ltd, emailed to the EPA on 3/8/2022 (EPA ref. DOC22/676151).

3 Limit Conditions

L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

L2 Load limits

L2.1 The actual load of an assessable pollutant discharged from the premises during the reporting period must not exceed the load limit specified for the assessable pollutant in the table below.

L2.2 The actual load of an assessable pollutant must be calculated in accordance with the relevant load calculation protocol.

Assessable Pollutant	Load limit (kg)
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Environment Protection Licence

Licence - 6423

Arsenic (Air)	
Benzene (Air)	
Benzo(a)pyrene (equivalent) (Air)	
Coarse Particulates (Air)	8768.00
Fine Particulates (Air)	5099.00
Fluoride (Air)	865.00
Lead (Air)	
Mercury (Air)	
Nitrogen Oxides (Air)	20481.00
Sulfur Oxides (Air)	16986.00
Volatile organic compounds (Air)	2436.00

Note: An assessable pollutant is a pollutant which affects the licence fee payable for the licence.

L3 Concentration limits

L3.1 For each monitoring/discharge point or utilisation area specified in the table/s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.

L3.2 Air Concentration Limits

POINT 1

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Gaseous fluoride	milligrams per cubic metre	2	Dry, 273K, 101.3kPa		1 hour (see condition L3.3)
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	1	Dry, 273K, 101.3kPa		1 hour (see condition L3.3)
Cyanide	milligrams per cubic metre	0.8	Dry, 273K, 101.3kPa		1 hour (see condition L3.3)
Dioxins & Furans	nanograms per cubic metre	0.1	Dry, 273K, 101.3kPa		2 hours
Carbon monoxide	milligrams per cubic metre	125	Dry, 273K, 101.3kPa		1 hour rolling
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	30	Dry, 273K, 101.3kPa		1 hour (see condition L3.3)

Environment Protection Licence

Licence - 6423

Solid Particles	milligrams per cubic metre	25	Dry, 273K, 101.3kPa	1 hour (see condition L3.3)
Hydrogen chloride	milligrams per cubic metre	50	Dry, 273K, 101.3kPa	1 hour (see condition L3.3)
Nitrogen Oxides	milligrams per cubic metre	200	Dry, 273K, 101.3kPa	1 hour block
Cadmium	milligrams per cubic metre	0.02	Dry, 273K, 101.3kPa	1 hour (see condition L3.3)

POINT 2

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Solid Particles	milligrams per cubic metre	35	Dry, 273K, 101.3kPa		1 hour (see condition L3.3)

POINT 3

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Solid Particles	milligrams per cubic metre	50	Dry, 273K, 101.3kPa		1 hour (see condition L3.3)

POINT 4

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Solid Particles	milligrams per cubic metre	24	Dry, 273K, 101.3kPa		1 hour (see condition L3.3)

POINT 13

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Volatile organic compounds	milligrams per cubic metre	77	Dry, 273K, 101.3kPa		1 hour rolling
Carbon monoxide	milligrams per cubic metre	125	Dry, 273K, 101.3kPa		1 hour rolling
Nitrogen Oxides	milligrams per cubic metre	100	Dry, 273K, 101.3kPa		1 hour block
Dioxins & Furans	nanograms per cubic metre	0.1	Dry, 273K, 101.3kPa		2 hours
Cadmium	milligrams per cubic metre	0.02	Dry, 273K, 101.3kPa		1 hour (see condition L3.3)
Hydrogen chloride	milligrams per cubic metre	10	Dry, 273K, 101.3kPa		1 hour (see condition L3.3)
Solid Particles	milligrams per cubic metre	10	Dry, 273K, 101.3kPa		1 hour (see condition L3.3)

Environment Protection Licence

Licence - 6423

Sulfuric acid mist and sulfur trioxide (as SO ₃)	milligrams per cubic metre	30	Dry, 273K, 101.3kPa	1 hour (see condition L3.3)
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	1	Dry, 273K, 101.3kPa	1 hour (see condition L3.3)

POINT 14

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Solid Particles	milligrams per cubic metre	10	Dry, 273K, 101.3kPa	15%	1 hour (see condition L3.3)

POINT 17

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	20	Dry, 273K, 101.3kPa	11%	1 hour rolling
Hydrogen chloride	milligrams per cubic metre	50	Dry, 273K, 101.3kPa	11%	1 hour (see condition L3.3)
Solid Particles	milligrams per cubic metre	20	Dry, 273K, 101.3kPa	11%	1 hour (see condition L3.3)
Sulfuric acid mist and sulfur trioxide (as SO ₃)	milligrams per cubic metre	80	Dry, 273K, 101.3kPa	11%	1 hour (see condition L3.3)
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	1.0	Dry, 273K, 101.3kPa	11%	1 hour (see condition L3.3)
Cadmium	milligrams per cubic metre	0.18	Dry, 273K, 101.3kPa	11%	1 hour (see condition L3.3)
Mercury	milligrams per cubic metre	0.2	Dry, 273K, 101.3kPa	11%	1 hour (see condition L3.3)
Nitrogen Oxides	milligrams per cubic metre	200	Dry, 273K, 101.3kPa	11%	1 hour block
Dioxins & Furans	nanograms per cubic metre	0.1	Dry, 273K, 101.3kPa	11%	2 hours
Sulfur dioxide	milligrams per cubic metre	200	Dry, 273K, 101.3kPa	11%	1 hour block
Carbon monoxide	milligrams per cubic metre	62.5	Dry, 273K, 101.3kPa	11%	1 hour rolling



Environment Protection Licence

Licence - 6423

POINT 18

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Solid Particles	milligrams per cubic metre	15	Dry, 273K, 101.3kPa		1 hour (see condition L3.3)

- L3.3 The Averaging Period is 1 hour, or the minimum sampling period specified in the relevant test method referred to in Part 1, Division 1 of the Protection of the Environment Operations (Clean Air) Regulation 2022, whichever is the greater.
- Note: The EPA intends to review the concentration limit for Volatile Organic Compounds for Point 17 based on the results from the Post Commissioning Verification Monitoring and Report.
- L3.4 The concentration of gaseous fluoride emitted to the atmosphere from Point 1 must not exceed 1.4 milligrams per cubic metre of fluoride, measured as a one hour average.
- L3.5 Total plant gaseous fluoride emissions must not exceed 0.25kg/hr.
- L3.6 Total plant particulate emissions must not exceed 5.43 kg/hour.

L4 Waste

- L4.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled “Waste” and meeting the definition, if any, in the column titled “Description” in the table below.
- Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled “Activity” in the table below.
- Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled “Other Limits” in the table below.
- This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	Clinical and related waste	Pathogenic substances only	Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
R120	Waste pharmaceuticals, drugs and medicines		Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
NA	Glass, plastic, paper or cardboard	Paper documents only	Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
J100	Waste mineral oils unfit for their original intended use	Oily rags only	Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant

Environment Protection Licence

Licence - 6423

J160	Waste tarry residues	Pitch sludge residues only	Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
J120	Waste oil/hydrocarbons mixtures/emulsions in water	Pitch sludge residues only	Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
G160	Waste from the production, formulation, and use of organic solvents	Solvents and paints only	Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
G150	Halogenated organic solvents	Solvents and paints only	Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
G110	Organic solvents excluding halogenated solvents	Solvents and paints only	Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
F110	Waste resin, latex, plasticiser, glue & adhesive	Solvents and paints only	Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
F100	Waste ink, dye, pigment, paint, lacquer & varnish	Solvents and paints only	Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
T100	Waste chemical substances arising from research and development or teaching activities, including those that are not identified and/or are new and whose effects on human health and/or the environment are not known		Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
R150	Quarantine Waste		Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
R140	Waste from the production & preparation of pharmaceutical products		Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
R130	Cytotoxic		Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant
R100	Clinical and related wastes		Waste disposal (thermal treatment) Waste storage	May only be processed in the Thermal Waste Treatment Plant

Environment Protection Licence

Licence - 6423

R120	Waste pharmaceuticals, drugs and medicines	Illicit drug and pharmaceutical waste	Waste disposal (thermal treatment) Waste storage	Combined total quantity of aluminium dross, spent pot lining, illicit drug and pharmaceutical waste must not exceed 5,000 tonnes stored on the premises at any time; and, no more than a combined total of 40,000 tonnes of aluminium dross, spent pot lining, illicit drug and pharmaceutical waste in any combination is to be processed per year. No more than 2,000 tonnes of pharmaceutical waste and no more than 5 tonnes of illicit drug waste is to be processed per year in the Rotary Furnace.
NA	Scrap metal	Scrap aluminium metal	Metallurgical Activities	No more than 35,000 tonnes of scrap metal is to be processed per year.
D100	Metal carbonyls	Spent potlining wastes from Australian primary aluminium smelters	Waste processing (non-thermal treatment) Waste storage	Combined total quantity of aluminium dross, spent pot lining, illicit drug and pharmaceutical waste must not exceed 5,000 tonnes stored on the premises at any time; and, no more than a combined total of 40,000 tonnes of aluminium dross, spent pot lining, illicit drug and pharmaceutical waste in any

Environment Protection Licence

Licence - 6423

A130	Cyanides (inorganic)	Spent potlining material wastes from Australian primary aluminium smelters	Waste processing (non-thermal treatment) Waste storage	combination is to be processed per year.
				Combined total quantity of aluminium dross, spent pot lining, illicit drug and pharmaceutical waste must not exceed 5,000 tonnes stored on the premises at any time; and, no more than a combined total of 40,000 tonnes of aluminium dross, spent pot lining, illicit drug and pharmaceutical waste in any combination is to be processed per year.
D300	Non toxic salts	Aluminium Dross	Waste storage Waste processing (non-thermal treatment)	Combined total quantity of aluminium dross, spent pot lining, illicit drug and pharmaceutical waste must not exceed 5,000 tonnes stored on the premises at any time; and, no more than a combined total of 40,000 tonnes of aluminium dross, spent pot lining, illicit drug and pharmaceutical waste in any combination is to be processed per year.

L4.2 The licensee must not process a combined total of more than 8,000 tonnes per year of the following wastes in the Thermal Waste Treatment Plant.

- Clinical and related waste (Waste Code R100);
- Pathogenic substances (Waste Code R110);
- Waste pharmaceuticals, drugs and medicines (Waste Code R120);
- Cytotoxic substances (Waste Code R130);

Environment Protection Licence

Licence - 6423

- Waste from the production and preparation of pharmaceutical products (Waste Code R140);
- Quarantine waste (Waste Code R150);
- Waste chemical substances arising from research and development or teaching activities, including those that are not identified and/or are new and whose effects on human health and/or the environment are not known (Waste Code T100);
- Solvent and paints (Waste Codes F100, F110, G110, G150 and G160);
- Pitch sludge residues (Waste Codes J120 and J160);
- Oily rags (Waste Code J100); and
- Paper documents.

L5 Noise limits

L5.1 Truck movements to and from the premises must only be undertaken between the hours of 7am and 10pm.

L5.2 Noise from the premises must not exceed the noise limits presented in the table below.

Note: Where amenity noise levels are lower than intrusive noise levels, both levels are in the licence condition in order to ensure that intrusive noise impacts are controlled at all times.

Location	Daytime	Evening	Night time
Residences at the corner of Government and 10th Streets	LAeq(15 minute) 48 dB(A)	LAeq(15 minute) 48dB(A), LAeq(evening) 40dB(A)	LAeq(15 minute) 47dB(A), LAeq(night) 35dB(A), LAeq(1 minute) 57dB(A)
Residences on Northcote Street	LAeq(15 minute) 44dB(A)	LAeq(15 minute) 44dB(A)	LAeq(15 minute) 44 dB(A), LAeq(night) 40dB(A), LAeq(1 minute) 57dB(A)
Residences in the Light Industrial Zone on Mitchell Avenue and Railway Avenue	LAeq(15 minute) 43dB(A)	LAeq(15 minute) 43dB(A)	LAeq(15 minute) 43dB(A), LAeq(night) 41dB(A), LAeq(1 minute) 55dB(A)

L6 Potentially offensive odour

L6.1 No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.

Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

L7 Other limit conditions

L7.1 The licensee must comply with the conditions as specified in this licence or where no specific conditions are outlined in this licence, the licensee must comply with the "Chemical Control Order in Relation to Aluminium

Environment Protection Licence

Licence - 6423

Smelter Wastes containing Fluoride and/or Cyanide, 1986".

4 Operating Conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:

- a) must be maintained in a proper and efficient condition; and
- b) must be operated in a proper and efficient manner.

O3 Dust

O3.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

O3.2 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.

O3.3 Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

O4 Processes and management

O4.1 All process water, leachate (water that has percolated through a solid including waste), and any stormwater that is contaminated by activities carried on at the Premises must be disposed of to trade waste (i.e. must not be disposed of or discharged to the environment) or another means that achieves the same outcome (E.g. collected and tankered offsite).

O5 Waste management

O5.1 The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force from time to time.

O5.2 The licensee must ensure that waste identified for recycling is stored separately from other waste.

Environment Protection Licence

Licence - 6423

O6 Other operating conditions

- O6.1 The continuous fluoride emission monitoring system associated must activate visible and audible alarms in the event that the concentration of fluoride emitted to atmosphere via Point 1 exceeds 1.4 milligrams per cubic metre.
 - O6.2 If the 1 hour average concentration of gaseous fluoride emitted to atmosphere exceeds 1.4 milligrams per cubic metre at Point 1, the plant or section of the plant where the exceedance occurs must cease operating until the licensee is able to ensure compliance with the emission limits specified in this licence.
 - O6.3 The automated lime dosing systems that feeds the baghouses that service Points 13 and 17 must activate and audible alarms in the event that insufficient lime is added to the baghouses.
 - O6.4 Logged data from the automated lime dosing systems that feeds the baghouses that services Points 13 and 17 must be kept on site for a period of at least 4 years after the data or record was obtained.
 - O6.5 The licensee must store and handle all liquid chemicals and hazardous materials used at the premises within bunded areas that are constructed and maintained in accordance with the following:
 - a) any relevant Australian Standards for the liquids being stored;
 - b) within a bunded area with a minimum bund capacity of 110% of the volume of the largest single stored vessel within the bund;
 - c) the Storing and Handling Liquids: Environmental Protection Participant's Manual (DECC, 2007); and where any conflict exists between these requirements, the most stringent requirements apply.
- Note: For the purpose of this condition, any tanks or other storage vessels that are interconnected and may distribute their contents either by gravity or automated pumps must be considered a single vessel.
- O6.6 The licensee must ensure that suitable measures (e.g. high/low alarms, control valves with interlock control, one way valves) are installed on all tanks, ponds or clarifiers and associated pipes and hoses to prevent the spillage of waste.
 - O6.7 The Reverberatory Furnace and No. 2 Rotary Furnace must not be operated simultaneously with emissions reporting to Baghouse No. 1.

Thermal Waste Treatment Plant

- O6.8 The thermal waste treatment plant must, as a minimum, use primary and secondary (i.e. two stage) combustion.
- O6.9 The maximum amount of waste that can be processed in the thermal waste treatment plant at any one time is 800 kilograms per hour.
- O6.10 The thermal waste treatment plant is limited to processing only the following wastes:
 - (a) Medical wastes;
 - (b) Quarantine wastes;
 - (c) Other wastes: limited to oily rags, pitch sludge residue and solvents and paints, confidential documents (no more than 10% by mass at any one time); and, waste chemical substances from research and development

Environment Protection Licence

Licence - 6423

or teaching activities (with prior specific written approval from the EPA).

O6.11 For the purposes of condition O6.10 there are currently no prior specific written approvals issued by the EPA.

O6.12 The Bypass Stack from the Thermal Waste Treatment Plant known as Stack 8 (Point 16) is not to be used, except in the event of an emergency shutdown. In the event that emissions are directed to and discharged from the Bypass Stack, the licensee must provide immediate notification to the EPA by telephoning the EPA's Environment Line on 131 555.

O6.13 All emissions from the burnout hearth must be directed to the emission control equipment associated with the thermal waste treatment plant.

O6.14 Emissions from Point 17 (Stack 5) must have a minimum stack discharge velocity of 18 metres per second.

O6.15 The licensee must permanently mark the floor of the Thermal Waste Treatment Plant building to delineate all areas identified for the safe storage of waste.

O6.16 Waste stored within the Thermal Waste Treatment Plant building must be stored within the areas marked and delineated for safe storage of waste, unless the waste is being prepared for processing or is being processed.

No. 2 Rotary Furnace - Processing of pharmaceutical and illicit drug waste

O6.17 Pharmaceutical waste and/or illicit drug waste that is of a liquid state of matter must not be co-processed with aluminium dross and/or spent pot lining.

O6.18 Pharmaceutical waste and/or illicit drug waste shall only be added to the No. 2 Rotary Furnace when its refractory surface temperature is measured to be greater than 500 degrees Celsius.

O6.19 Pharmaceutical waste and/or illicit drug waste must not be added to the No. 2 Rotary Furnace at a rate exceeding 50 kilograms per 10 minutes.

O6.20 When processing pharmaceutical waste and/or illicit drug waste in the No. 2 Rotary Furnace, the temperature of the exhaust gas exiting the No. 2 Rotary Furnace must be:

- (a) continuously monitored;
- (b) maintained at or above 850 degrees Celsius while processing; and
- (c) recorded by a data logging system at a frequency not exceeding 1 minute intervals.

O6.21 The licensee must cease thermally processing pharmaceutical waste and/or illicit drug waste in the No. 2 Rotary Furnace if monitoring results show an exceedance of the dioxin and furan concentration limit specified under the licence for Point 1.

5 Monitoring and Recording Conditions

M1 Monitoring records

M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be



Environment Protection Licence

Licence - 6423

recorded and retained as set out in this condition.

- M1.2 All records required to be kept by this licence must be:
- a) in a legible form, or in a form that can readily be reduced to a legible form;
 - b) kept for at least 4 years after the monitoring or event to which they relate took place; and
 - c) produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
- a) the date(s) on which the sample was taken;
 - b) the time(s) at which the sample was collected;
 - c) the point at which the sample was taken; and
 - d) the name of the person who collected the sample.

M2 Requirement to monitor concentration of pollutants discharged

- M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:
- M2.2 Air Monitoring Requirements

POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Special Frequency 2	TM-14
Carbon monoxide	milligrams per cubic metre	Special Frequency 2	TM-32
Cyanide	milligrams per cubic metre	Special Frequency 2	Special Method 2
Dioxins & Furans	nanograms per cubic metre	Special Frequency 2	TM-18
Gaseous fluoride	milligrams per cubic metre	Continuous	Special Method 1
Hydrogen chloride	milligrams per cubic metre	Special Frequency 2	TM-7 & TM-8
Moisture	percent	Special Frequency 2	TM-22
Molecular weight of stack gases	grams per gram mole	Special Frequency 2	TM-23
Nitrogen Oxides	milligrams per cubic metre	Special Frequency 2	TM-11
Oxygen (O2)	percent	Special Frequency 2	TM-25
Solid Particles	milligrams per cubic metre	Special Frequency 2	TM-15
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Special Frequency 2	TM-3
Temperature	degrees Celsius	Special Frequency 2	TM-2

Environment Protection Licence

Licence - 6423

Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Special Frequency 2	TM-12, TM-13 & TM-14
Velocity	metres per second	Special Frequency 2	TM-2
Volumetric flowrate	cubic metres per second	Special Frequency 2	TM-2

POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
Solid Particles	milligrams per cubic metre	Special Frequency 1	TM-15

POINT 3

Pollutant	Units of measure	Frequency	Sampling Method
Solid Particles	milligrams per cubic metre	Special Frequency 1	TM-15

POINT 4

Pollutant	Units of measure	Frequency	Sampling Method
Solid Particles	milligrams per cubic metre	Yearly	TM-15

POINT 13

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Yearly	TM-14
Dioxins & Furans	nanograms per cubic metre	Every 6 months	TM-18
Dry gas density	kilograms per cubic metre	Every 6 months	TM-23
Fluorides	milligrams per cubic metre	Yearly	TM-10
Hydrogen chloride	milligrams per cubic metre	Yearly	TM-7 & TM-8
Moisture content	percent	Yearly	TM-22
Nitrogen Oxides	milligrams per cubic metre	Yearly	TM-11
Oxygen (O ₂)	percent	Every 6 months	TM-25
Solid Particles	milligrams per cubic metre	Yearly	TM-15
Sulfuric acid mist and sulfur trioxide (as SO ₃)	milligrams per cubic metre	Yearly	TM-3
Temperature	degrees Celsius	Yearly	TM-2
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly	TM-12, TM-13 & TM-14
Velocity	metres per second	Every 6 months	TM-2
Volatile organic compounds	milligrams per cubic metre	Yearly	OM-2

Environment Protection Licence

Licence - 6423

Volumetric flowrate	normalised cubic metres per second	Every 6 months	TM-2
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POINT 14

Pollutant	Units of measure	Frequency	Sampling Method
Carbon monoxide	milligrams per cubic metre	Yearly	OM-1
Dry gas density	kilograms per cubic metre	Yearly	TM-23
Moisture content	percent	Yearly	TM-22
Nitrogen Oxides	milligrams per cubic metre	Yearly	TM-11
Oxygen (O ₂)	percent	Yearly	TM-25
Solid Particles	milligrams per cubic metre	Yearly	TM-15
Temperature	degrees Celsius	Yearly	TM-2
Velocity	metres per second	Yearly	TM-2
Volumetric flowrate	normalised cubic metres per second	Yearly	TM-2

POINT 17

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Quarterly	TM-14
Carbon monoxide	milligrams per cubic metre	Continuous	CEM-4
Dioxins & Furans	milligrams per cubic metre	Quarterly	TM-18
Dry gas density	milligrams per cubic metre	Quarterly	TM-23
Hydrogen chloride	milligrams per cubic metre	Continuous	Special Method 3
Mercury	milligrams per cubic metre	Quarterly	TM-14
Nitrogen Oxides	milligrams per cubic metre	Quarterly	TM-11
Oxygen (O ₂)	percent	Continuous	CEM-3
Solid Particles	milligrams per cubic metre	Continuous	Special Method 4
Sulfur dioxide	milligrams per cubic metre	Quarterly	TM-4
Sulfuric acid mist and sulfur trioxide (as SO ₃)	milligrams per cubic metre	Quarterly	TM-3
Temperature	Kelvin	Continuous	CEM-6
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Quarterly	TM-12, TM-13 & TM-14
Velocity	metres per second	Continuous	CEM-6
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Quarterly	TM-34
Volumetric flowrate	cubic metres per second	Continuous	CEM-6



Environment Protection Licence

Licence - 6423

POINT 18

Pollutant	Units of measure	Frequency	Sampling Method
Solid Particles	milligrams per cubic metre	Yearly	TM-15

- M2.3 For the purposes of the table(s) above:
- (a) Special Method 1 means a continuous gaseous fluoride monitor.
 - (b) Special Method 2 means USEPA OTM-29.
 - (c) Special Method 3 means US EPA Performance Specification 18, or an alternative method agreed to in writing by the EPA.
 - (d) Special Method 4 means US EPA Performance Specification 11, or an alternative method agreed to in writing by the EPA.

Test Method (TM) Sampling must be conducted under conditions associated with reasonable worse-case emissions potential, with consideration of process load and waste composition.

- M2.4 In relation to condition M2.3 no alternative method or methods have been agreed to in writing by the EPA.

- M2.5 For the purposes of the tables above:
- (a) Special Frequency 1 means the collection of samples yearly upon the licensee first returning the emissions units that report to these points to service in the event that Fabric Filter Baghouses No. 2 and No. 3 are reinstated at the premises.
 - (b) Special Frequency 2 means the collection of samples:
 - (i) yearly, during the processing of aluminium dross and/or spent pot lining, or the co-processing of aluminium dross and/or spent pot lining with pharmaceutical waste and/or illicit drug waste that is of a solid state of matter; and
 - (ii) twice yearly (at least six months apart), during the processing of pharmaceutical waste and/or illicit drug waste that is of a liquid state of matter.

Note: The EPA may revise Special Frequency 2 after reviewing two rounds of monitoring (i.e. 12 months after the addition of Special Frequency 2 to the licence).

- M2.6 Water and/ or Land Monitoring Requirements

POINT 12

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	milligrams per litre	Yearly	Grab sample
Conductivity	microsiemens per centimetre	Yearly	Grab sample
Cyanide	milligrams per litre	Yearly	Grab sample
Fluoride	milligrams per litre	Yearly	Grab sample
pH	pH	Yearly	Grab sample

Environment Protection Licence

Licence - 6423

Total suspended solids	milligrams per litre	Yearly	Grab sample
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M3 Testing methods - concentration limits

- M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:
- any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
 - if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
 - if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

- M3.2 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2022* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

M4 Testing methods - load limits

Note: Division 4 of the *Protection of the Environment Operations (General) Regulation 2022* requires that monitoring of actual loads of assessable pollutants listed in L2.2 must be carried out in accordance with the relevant load calculation protocol set out for the fee-based activity classification listed in the Administrative Conditions of this licence.

M5 Recording of pollution complaints

- M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.
- M5.2 The record must include details of the following:
- the date and time of the complaint;
 - the method by which the complaint was made;
 - any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - the nature of the complaint;
 - the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
 - if no action was taken by the licensee, the reasons why no action was taken.

Environment Protection Licence

Licence - 6423

M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M6 Telephone complaints line

M6.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

M6.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

M6.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

6 Reporting Conditions

R1 Annual return documents

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

R1.3 Where this licence is transferred from the licensee to a new licensee:

- a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
- b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

Environment Protection Licence

Licence - 6423

- R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:
- a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
 - b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.
- R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').
- R1.6 Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date. The notification must specify:
- a) the assessable pollutants for which the actual load could not be calculated; and
 - b) the relevant circumstances that were beyond the control of the licensee.
- R1.7 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.
- R1.8 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
- a) the licence holder; or
 - b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

R2 Notification of environmental harm

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.

R3 Written report

- R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
- a) where this licence applies to premises, an event has occurred at the premises; or
 - b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,
- and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

Environment Protection Licence

Licence - 6423

- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:
- a) the cause, time and duration of the event;
 - b) the type, volume and concentration of every pollutant discharged as a result of the event;
 - c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
 - d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
 - e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
 - f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
 - g) any other relevant matters.
- R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.
- R3.5 A noise compliance assessment report must be prepared every three years and submitted to the EPA with the Annual Return. The report must be prepared by an accredited acoustical consultant and must provide an assessment of compliance with Condition L5.2.

R4 Other reporting conditions

Reporting air exceedances

- R4.1 Within seven days of becoming aware of an exceedance of the air concentration limits provided under the Protection of the Environment Operations (Clean Air) Regulation 2022 (as amended), or the licence, the licensee must provide a written report to the EPA. The report must include, but is not limited to, the following.
- (a) The date that the monitoring was undertaken.
 - (b) Details of the Point that the monitoring was undertaken where the exceedance occurred.
 - (c) The pollutant in which the concentration limit was exceeded.
 - (d) The monitored concentration of the pollutant that the limit was exceeded.
 - (e) The operating conditions of the respective plant at the time that the monitoring was undertaken.
 - (f) The cause, or likely cause, of the concentration limit exceedance.
 - (g) Action taken, or proposed to be taken, by the licensee in response to the exceedance.

The report must be emailed to the EPA at info@epa.nsw.gov.au.

Note: The condition above does not remove any requirement to notify pollution incidents causing or threatening environmental harm under Part 5.7 of the Act.

Reinstating Fabric Filter Baghouses No. 2 and No. 3

- R4.2 The licensee must provide written notification to the EPA within seven days of reinstating Fabric Filter Baghouses No. 2 and No. 3, that report to Points 2 and 3, and returning them to operations. The notification



Environment Protection Licence

Licence - 6423

must be provided by email to info@epa.nsw.gov.au.

No. 2 Rotary Furnace - Processing of pharmaceutical and illicit drug waste

- R4.3 All pharmaceutical waste and illicit drug waste (whether solid or liquid state of matter) processed in the No. 2 Rotary Furnace must be identified and recorded. The information recorded must include, but is not limited to, the following.
- (a) The type of waste processed (pharmaceutical and/or illicit drug waste) and the physical state of matter of the waste (i.e. solid or liquid).
 - (b) A general description of the waste.
 - (c) The date and time the waste was added to the No. 2 Rotary Furnace.
 - (d) Details of any consignment numbers or identification used to track the consignment of waste.
 - (e) Details of whether the waste was co-processed with either aluminium dross or spent pot lining.

Records must be maintained for at least four years from the date that the waste was processed; and produced to any authorised officer of the EPA who asks to see them.

7 General Conditions

G1 Copy of licence kept at the premises or plant

- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

G2 Contact number for incidents and responsible employees

- G2.1 The licensee must operate 24-hour telephone contact lines for the purpose of enabling the EPA to directly contact one or more representatives of the licensee who can:
- a) respond at all times to incidents relating to the premises; and
 - b) contact the licensee’s senior employees or agents authorised at all times to:
 - i) speak on behalf of the licensee; and
 - ii) provide any information or document required under this licence.

G3 Other general conditions

G3.1 Completed Programs

Program	Description	Completed Date
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Environment Protection Licence

Licence - 6423

Secondary Aluminium Smelter Best Practice	Report comparing design, performance, operation against international best practice for 2nd'ry aluminium smelters. Include pre-sorting of feed material, fugitive emissions capture and dioxin control. Aim to minimise fugitives and DP13<1ng/m3 at all times. Reduce fugitive and point source emissions of dioxins and furans.	01-March-2006
Sealed Feeding System	Provide a report detailing preferred sealed feeding system to load scrap aluminium and heat recovery technology options, fugitive dioxin emission are minimise and dioxin emissions are less than 0.1 ng/m3.	27-November-2006
Performance of lime fed baghouse scrubber	Provide an evaluation report on the performance of the lime fed baghouse scrubber to ensure that dioxin emissions are less than 0.1 ng/m3 from DP13.	01-December-2006
Investigation into catalytic coated filter bags	Investigation into catalytic coated filter bags. To ensure that dioxin emission are less than 0.1 ng/m3 at DP13.	20-April-2009
Commencement of works	Prior to commencement of works - demonstrate that changes to emission collection system serving reverb furnace will have acceptable off site impact via modelling. Ensure that works are effective in ensuring that fugitive emission are captured and dioxin emissions are less than 0.1 ng/m3 at DP 13.	04-September-2007
Investigation of re-use of contaminated surface water	Investigation of sustainable on-site re-use of contaminated surface water. Ensure that on site disposal of high Al and F water is sustainable and does not impact on soil or surface water quality.	31-May-2007
PRP 7 - Fugitive Emission Capture	Continuous Improvement Program - Fugitive Emission Capture - demonstrate fugitive emissions capture from reverberatory furnace hood. Decrease fugitive emissions of air pollutants including dioxins and furans.	31-August-2010
Measurement of lime usage	Demonstrate auditable means of measuring lime usage rate to Baghouse 5. Control dioxin and furan emissions.	31-August-2010
Measurement of metal level	Demonstrate auditable means of measuring the metal level within the reverberatory furnace. Control the emission of dioxins and furans.	31-August-2010
Procedures to minimise fugitive emissions	Describe procedures to minimise fugitive emissions from the reverberatory furnace. Control emission of dioxins and furans.	31-August-2010
Spent Potlining Material Processing Trial	Spent Potlining Material Processing Trial. Comprehensive air quality monitoring throughout the trial.	09-November-2010
Spent Potlining Material Processing Trial (2)	Spent Potling Material Processing Trial. Comprehensive air quality monitoring throughout the trial.	14-June-2012
Investigation of dioxins and furans in reverberatory furnace combustion emissions	Investigation to determine if dioxin and furans in reverberatory furnace combustion emissions are significantly greater than dioxins and furans in emissions from straight natural gas combustion.	14-September-2012

Environment Protection Licence

Licence - 6423

Mixed Spent Pot Lining Trial	3000 Tonnes Mixed Spent Potlining Processing Trial to be performed over a twelve month interval.	23-May-2016
Authorised Waste Storage	A study to identify the amount of waste that can be lawfully and safely stored at the Premises at any one time (Authorised Amount).	29-March-2022
Assess Integrity and Permeability of Bunds	The licensee must engage an independent, suitably experienced, and qualified professional to assess and provide a report on the presence, adequacy, structural integrity, and permeability of all bunding structures and hard stand areas including storage and sheds at the premises.	31-March-2022
Premises Water Management System	The licensee must complete a site water management plan, process water sampling plan and leachate management plan.	14-February-2022

8 Special Conditions

E1 Compliance audit

- E1.1 The licensee must conduct an independent compliance audit no less than once every three (3) years to assess and report on compliance with the conditions of this licence, including the adequacy of the documentation required by this licence. A report containing the audit findings must be submitted with the Annual Return.

E2 Thermal Processing Facility (SSD7396)

Construction of Thermal Processing Facility

- E2.1 This condition authorises construction activities only for the thermal processing facility approved by Development Consent SSD7396. Works and activities must be carried out in accordance with the documents contained in the licence application, except as expressly provided by a condition of this licence.
- E2.2 Unless otherwise specified by another condition of this licence, construction activities must only be carried out:
- (a) Between the hours of 7am and 6pm Monday to Friday;
 - (b) between the hours of 8am and 1pm Saturday; and
 - (c) at no time on Sunday or Public Holidays.
- E2.3 The licensee must ensure that all feasible and reasonable noise and vibration mitigation and management measures are implemented during construction work authorised by the licence, in accordance with the Interim Construction Noise Guideline (DECC,2009).
- E2.4 At least three days prior to commissioning the Thermal Processing Facility, the licensee must provide written notification to the EPA advising its intention to commence commissioning the Thermal Processing Facility. Notification must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to



Environment Protection Licence

Licence - 6423

info@epa.nsw.gov.au.

Post Commissioning Air Emissions Verification Monitoring and Report

- E2.5 Within seven days of commissioning the Thermal Treatment Facility, the licensee must provide written notification to the EPA advising commissioning of the Thermal Treatment Facility. The notification must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to info@epa.nsw.gov.au.
- E2.6 Within three months of commissioning the thermal waste treatment plant, the licensee must submit to the EPA a Post Commissioning Air Emissions Verification Monitoring and Report which includes, but is not limited to, the following.
- (a) Air emissions sampling results for the thermal waste treatment plant obtained in accordance with the EPA approved Post Commissioning Proof of Performance Air Emission Sampling Plan included within the Weston Aluminium Preconstruction Design Report, Revision 2, dated July 2019;
 - (b) Comparison of the emission sampling results against the licensed concentration limits;
 - (c) Detailed evaluation of potential off-site impacts based on measured emission concentrations and rates; and
 - (d) Proposed approach, including timeframe for implementation, to resolve any non-compliances with the licensed concentration limits and the applicable standards of concentration under the Protection of the Environment Operations (Clean Air) Regulation 2021.

The Post Commissioning Air Emissions Verification Monitoring and Report must be provided to the EPA's Director - Hunter at PO Box 488G, Newcastle NSW 2300, or emailed to info@epa.nsw.gov.au.

E3 No. 2 Rotary Furnace - Processing of pharmaceutical and illicit drug waste

- E3.1 The licensee must provide notification within seven days of first processing pharmaceutical waste and/or illicit drug waste that is of a liquid state of matter in the No. 2 Rotary Furnace. The notification must be provided in writing and emailed to the EPA at info@epa.nsw.gov.au.
- E3.2 Within six weeks of first processing pharmaceutical waste and/or illicit drug waste that is of a liquid state of matter in the No. 2 Rotary Furnace, the licensee must undertake the first full round of air emissions monitoring required under the licence for Point 1 while processing this waste; and, provide a report to the EPA.
- (a) Sampling should be undertaken when processing the waste only at the maximum feed rate.
 - (b) The batch cycle should be a minimum of 2 hours to allow for a complaint dioxin test duration. Where this is not practical, a sampling plan must be developed in discussion with the EPA.

The report must present the details of the sampling undertaken; a summary of the monitoring results, compared against the pollutant concentration limit specified in the licence. The report must be provided by email to info@epa.nsw.gov.au.

Note: This monitoring may count towards the first round of monitoring required under Special Frequency 2 for Point 1 under the licence.



Environment Protection Licence

Licence - 6423

Dictionary

General Dictionary

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
BOD	Means biochemical oxygen demand
CEM	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

Environment Protection Licence

Licence - 6423

flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TM	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .



Environment Protection Licence

Licence - 6423

TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non-putrescible), special waste or hazardous waste
Wellhead	Has the same meaning as in Schedule 1 to the Protection of the Environment Operations (General) Regulation 2021.

Mr Bernie Weir

Environment Protection Authority

(By Delegation)

Date of this edition: 26-April-2000

Environment Protection Licence

Licence - 6423


End Notes

- 1 Licence varied by notice 1013185, issued on 28-Nov-2001, which came into effect on 23-Dec-2001.
- 2 Licence varied by notice 1014219, issued on 15-Apr-2002, which came into effect on 10-May-2002.
- 3 Licence varied by notice 1017402, issued on 30-Aug-2002, which came into effect on 24-Sep-2002.
- 4 Licence varied by notice 1026798, issued on 14-Aug-2003, which came into effect on 08-Sep-2003.
- 5 Licence varied by notice 1036624, issued on 02-Sep-2004, which came into effect on 27-Sep-2004.
- 6 Licence varied by notice 1051350, issued on 21-Feb-2006, which came into effect on 18-Mar-2006.
- 7 Licence varied by notice 1059849, issued on 14-Sep-2006, which came into effect on 14-Sep-2006.
- 8 Licence varied by notice 1068022, issued on 03-May-2007, which came into effect on 03-May-2007.
- 9 Licence varied by notice 1075595, issued on 04-Sep-2007, which came into effect on 04-Sep-2007.
- 10 Licence varied by notice 1079692, issued on 01-Nov-2007, which came into effect on 01-Nov-2007.
- 11 Licence varied by notice 1082016, issued on 18-Jan-2008, which came into effect on 18-Jan-2008.
- 12 Licence varied by notice 1084007, issued on 27-Mar-2008, which came into effect on 27-Mar-2008.
- 13 Licence varied by notice 1087174, issued on 14-May-2008, which came into effect on 14-May-2008.
- 14 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 15 Licence varied by notice 1093631, issued on 03-Dec-2008, which came into effect on 03-Dec-2008.
- 16 Licence varied by notice 1096523, issued on 01-May-2009, which came into effect on 01-May-2009.
- 17 Licence varied by notice 1106654, issued on 25-Sep-2009, which came into effect on 25-Sep-2009.
- 18 Licence varied by notice 1108647, issued on 13-Nov-2009, which came into effect on 13-Nov-2009.

Environment Protection Licence

Licence - 6423

19	Licence varied by notice 1111022, issued on 01-Feb-2010, which came into effect on 01-Feb-2010.
20	Licence varied by notice 1111304, issued on 23-Jul-2010, which came into effect on 23-Jul-2010.
21	Licence varied by notice 1118230, issued on 10-Aug-2010, which came into effect on 10-Aug-2010.
22	Licence varied by notice 1501309 issued on 29-Aug-2011
23	Licence varied by notice 1502941 issued on 13-Dec-2011
24	Licence varied by notice 1507415 issued on 27-Jul-2012
25	Licence varied by notice 1508430 issued on 25-Sep-2012
26	Licence varied by notice 1510441 issued on 02-Jan-2013
27	Licence varied by notice 1512256 issued on 15-Mar-2013
28	Licence varied by notice 1519974 issued on 10-Jul-2014
29	Licence varied by notice 1531395 issued on 15-Jul-2015
30	Licence varied by notice 1534264 issued on 01-Oct-2015
31	Licence varied by notice 1535147 issued on 29-Oct-2015
32	Licence varied by notice 1552663 issued on 28-Jun-2017
33	Licence varied by notice 1567209 issued on 18-Jul-2018
34	Licence varied by notice 1578394 issued on 29-May-2019
35	Licence varied by notice 1581163 issued on 16-Aug-2019
36	Licence varied by notice 1586144 issued on 17-Feb-2020
37	Licence varied by notice 1594085 issued on 05-Nov-2020
38	Licence varied by notice 1614636 issued on 15-Dec-2021
39	Licence varied by notice 1618379 issued on 24-Jun-2022
40	Licence varied by notice 1621543 issued on 25-Aug-2022
41	Licence varied by notice 1625495 issued on 09-Mar-2023

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	30 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

ATTACHMENT 2

**DETERMINATION OF A DEVELOPMENT APPLICATION
FOR STATE SIGNIFICANT, DESIGNATED AND INTEGRATED DEVELOPMENT
UNDER SECTION 80 OF THE
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979**

I, the Minister for Urban Affairs and Planning, under Section 80 of the *Environmental Planning and Assessment Act 1979* ("the Act") and clause 8 of *State Environmental Planning Policy No. 34 - Major Employment-Generating Industrial Development*, determine the development application ("the Application") referred to in Schedule 1 by granting consent subject to the conditions set out in Schedule 2. The reason for the imposition of conditions is to minimise any adverse environmental impacts associated with the development.

DA 86-04-01 Mod 3 – determined 4 September 2009
DA 86-04-01 Mod 4 – determined 5 August 2010
DA 86-04-01 Mod 5 – determined 7 February 2011
DA 86-04-01 Mod 6 – determined 25 October 2011
DA 86-04-01 Mod 7 – determined 7 September 2012
DA 86-04-01 Mod 8 – determined 17 February 2013
DA 86-04-01 Mod 9 – determined 15 September 2015
DA 86-04-01 Mod 10 – determined 1 March 2017
DA 86-04-01 Mod 11 – withdrawn
DA 86-04-01 Mod 12 – determined 2 August 2019
DA 86-04-01 Mod 14 – determined 3 September 2020

Andrew Refshauge MP
Deputy Premier
Minister for Urban Affairs and Planning
Minister for Aboriginal Affairs
Minister for Housing

Sydney,

2001

File No. S00/00975

SCHEDULE 1

Application made by:	Weston Aluminium Pty Ltd ("the Applicant");
To:	The Minister for Urban Affairs and Planning ("the Minister");
In respect of:	Lot 796 DP 39877 , Lot 61 DP 1237125 Parish of Heddon, Cessnock local government area;
For the following:	Additions and extensions to an existing aluminium dross recycling plant including: <ul style="list-style-type: none">a) construction of an open scrap storage and sorting pad and an enclosed scrap storage warehouse;b) extension of the existing plant building to allow for ingot casting, molten aluminium handling and aluminium alloying;c) construction of an ingot storage and loading facility;d) construction of an enclosed ALDEX storage and dispatch facility, incorporating a workshop area; ande) extensions to the existing administration building, carpark and dross off-loading and sorting areas ("the development").f) construction of a briquetting facility within the ALDEX building
Development Application:	Integrated DA No. 86-04-01, lodged with the Department of Urban Affairs and Planning on 30 April 2001;
State Significant Development	Under Section 76A(7) of the Act, the proposed development is classified as State Significant development because it is a type of development (metals, minerals or extractive materials processing) listed in Schedule 1 of <i>State Environmental Planning Policy No. 34 - Major Employment Generating Industrial Development</i> and has a capital investment in excess of \$20 million.
BCA Classification:	Class 5 - administration building Class 8 - plant building bag houses

Class 10a - ALDEX building
warehouse

Note:

- 1) To ascertain the date upon which this consent becomes effective, refer to Section 83 of the Act.
- 2) To ascertain the date upon which this consent is liable to lapse, refer to Section 95 of the Act.
- 3) If the Applicant is dissatisfied with this determination, Section 97 of the Act grants him or her a right of appeal to the Land and Environment Court, which is exercisable within 12 months of receiving notice of this determination.

DEFINITIONS

AEMR	Annual Environmental Management Report
Applicant	Weston Aluminium Pty Ltd
BCA	Building Code of Australia
Council	Cessnock City Council
Court	Land and Environment Court
Day	The period from 7 am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
DECCW	Department of Environment, Climate Change and Water
Department	Department of Planning and Infrastructure
Department	Department of Planning, Industry and Environment
Development	Establishment of a dross recycling facility and associated infrastructure (as described in the EIS and SEE, see below)
Planning Secretary	Planning Secretary of the Department (or delegate)
EIS	Environmental Impact Statement prepared by URS for Weston Aluminium Pty Ltd entitled <i>Additions to the Kurri Kurri Aluminium Refining and Recycling Facility</i> , Volumes 1-3 (dated 23 April 2001), including the following supporting documentation: <ul style="list-style-type: none">• Preliminary Hazard Analysis, prepared by Granherne Pty Ltd (dated 25 October 1999);• Molten Metal Transportation Risk Assessment, prepared by Granherne Pty Ltd (dated 25 October 1999);• Additional Information Requested by EPA for Noise Impact Assessment, prepared by URS (dated 19 June 2001);• Additional Information Requested by EPA for Noise Impact Assessment - Supplement 1, prepared by URS (dated 3 July 2001);• Additional Information Requested by EPA for Noise Impact Assessment - Supplement 2, prepared by URS (dated 3 July 2001);• Response to EPA Request for Information in respect of air quality impacts, prepared by URS (dated July 2001);• Flora and Fauna Habitat Investigations for Proposed Extensions to Existing Aluminium Recycling Facility, Kurri Kurri, NSW, prepared by HLA-Envirosciences Pty Ltd (dated 25 June 2001); and Environmental Impact Statement prepared by Envirosciences Pty Ltd for Weston Aluminium Pty Ltd entitled <i>Environmental Impact Statement for an Aluminium Dross Recycling and Alloying Plant at Kurri Kurri</i> (dated July 1994), including the following supporting documentation: <ul style="list-style-type: none">• Inspection Protocol for Imported Dross, approved by the Land and Environment Court on 7 April 2000;• Attachment A, entitled Supplementary Information Relating to Plant Design Refinements and Improvements to a Proposed Aluminium Dross Recycling and Alloying Plant at Kurri Kurri (exhibited from 10 July 1995 to 9 August 1995);• Waste Management Plan, prepared by Mr P.C. Raymond (dated 2 August and approved by EPA on 5 May 1995); and• Preliminary Hazard Analysis prepared by BHP Engineering (dated July 1994);
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning & Assessment Regulation 2000</i>
EPA	Environment Protection Authority
EPL	Environmental Protection Licence
Evening	The period from 6pm to 10pm
Extended Spent Potlining Material	The proposed 12 month trial of processing spent potlining material, as described

Processing Trial	in the Modification Application DA-86-04-01 Mod 6 and 10397 Mod 4, and Environmental Assessment dated June 2011
First cut spent potlining	spent potlining material originating from the carbon lining of aluminium reduction cells (pots)
LEC	Land and Environment Court
Minister	Minister for Planning and Infrastructure
Minister	Minister for Planning and Public Spaces
Mixed spent potlining	Combination of first and second cut spent potlining material
DA-86-04-01-Mod 1	Alternations to the administration building extension, as approved by the Minister on 4 October 2001
DA-86-04-01-Mod 2	Addition of an annex on the process building, as approved by the Minister on 8 August 2002
DA-86-04-01-Mod 3	Addition of new process and storage areas, and increased operational efficiency of the existing development, as described in the Statement of Environmental Effects to Support Modification Applications for Aluminium Dross Recycling Facility, prepared by ENRS Australia Pty Ltd for Weston Aluminium Pty Ltd (dated 21 November 2007)
DA-86-04-01-Mod 5	Construction and operation of a briquetting facility to process Aldex ash into briquettes in the existing Aldex building, as described in the assessment prepared by GHD and dated November 2010
DA-86-04-01 Mod 8	A 12 month trial processing mixed spent potlining in existing rotary furnaces as described in the assessment prepared by Weston Aluminium and dated 30 November 2012
DA-86-04-01 Mod 9	A 24 month trial processing illicit drug and pharmaceutical waste in existing furnaces as described in the assessment prepared by Weston Aluminium and dated 12 March 2015 and the Response to Submissions prepared by Weston Aluminium and dated 15 July 2015
DA-86-04-01 Mod 10	Removing the distinction between spent potlining types thereby allowing the commercial scale processing of 1st Cut and 2nd Cut spent potlining as well as a mixture of both as described in the assessment prepared by AECOM and dated 8 September 2016 and the Response to Submissions prepared by AECOM and dated 13 December 2016
DA-86-04-01 Mod 12	To allow the processing of up to 2,000 tonnes per year of pharmaceutical waste and 5 tonnes per year of illicit drug waste in existing rotary furnaces
DA-86-04-01 Mod 14	The modification as described in the Statement of Environmental Effects prepared by AECOM, titled <i>Weston Aluminium Facility Emissions Reconfiguration</i> and dated 4 June 2020 and the letter dated 24 Jul 2020 prepared by Todoroski Air Sciences including the Emissions Testing Report October 2013 Stack 5 and 6 dated 22 November 2013 prepared by AECOM as amended by the <i>Weston Aluminium Facility Emission Reconfiguration Modification Report</i> dated 9 March 2021 prepared by AECOM and the letter dated 29 July 2021 prepared by Todoroski Air Sciences
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Planning Secretary	Planning Secretary under the EP&A Act, or nominee
Reasonable and Feasible	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements. Feasible relates to engineering considerations and what is practical to build.
Second cut spent potlining	Spent potlining material originating from the refractory lining of aluminium reduction cells (pots)
SEE	Statement of Environmental Effects provided to support Modification Applications for Aluminium Dross Recycling Facility, prepared by ENRS Australia Pty Ltd for Weston Aluminium Pty Ltd (dated 21 November 2007)
Planning Secretary	The Planning Secretary of the Department of Planning and Environment, or nominee
Site	Land to which the development application applies
SPL	Spent Potlining
Spent Potlining Material Processing Trial	The proposed 2 week trial of processing spent potlining material, as described in the Modification Application DA-86-04-01 Mod 4 and 10397 Mod 2, and the enclosed Letter dated 26 May 2010 and Attachments 1, 2 and 3.

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

1. The Applicant shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction and/or operation of the development.

Terms of Approval

2. The Applicant shall carry out the development generally in accordance with the:
 - a) EIS as modified by the SEE;
 - b) site plans (see Appendix A);
 - c) conditions of this approval; and, during the spent potlining material processing trial,
 - d) modification application DA-86-04-01 Mod 4 and 10397 Mod 2, and the enclosed Letter dated 26 May 2010 and Attachments 1, 2 and 3.
 - e) Modification application DA-86-04-01 Mod 5 and 10397 Mod 3, and the enclosed SEE, dated November 2010, prepared by GHD; and
 - f) during the extended spent potlining material processing trial, modification application DA-86-04-01 Mod 6 and 10397 Mod 4, and the enclosed Environmental Assessment, dated June 2011 and the Response to Submissions dated 17 August 2011, prepared by Weston Aluminium.
 - g) Modification application DA-86-04-01 Mod 7 and 10397 DA 10397 of 1995 Mod 5, and the enclosed Environmental Assessment, dated 10 May 2012, prepared by AECOM and the Response to Submissions dated 21 June 2012, prepared by Weston Aluminium.
 - h) Modification application DA-86-04-01 Mod 8 and DA 10397 of 1995 Mod 6, and the enclosed Environmental Assessment, dated 30 November 2012, prepared by Weston Aluminium.
 - i) Modification request DA 86-04-01 Mod 9 and DA 10397 of 1995 Mod 7 and the enclosed Environmental Assessment, dated 12 March 2015, prepared by Weston Aluminium and the Response to Submissions, dated 15 July 2015, prepared by Weston Aluminium.
 - j) Modification request Modification request DA 86-04-01 Mod 10 and DA 10397 of 1995 Mod 8 and the enclosed Environmental Assessment, dated 8 September 2016, prepared by AECOM and the Response to Submissions, dated 13 December 2016, prepared by AECOM.
 - k) Modification request DA 86-04-01 Mod 12 and DA 10397 of 1995 Mod 10 and the enclosed Environmental Assessment, dated 10 July 2017, prepared by AECOM and the Response to Submissions, dated 3 November 2017 as amended by the additional information received on 12 April 2018, 30 August 2018, 22 October 2018, 13 December 2018, 28 February 2019, 8 April 2019 and 3 May 2019.
 - l) Modification application DA 86-04-01 MOD 14 and the enclosed Statement of Environmental Effects, dated 4 June 2020 prepared by AECOM and the letter dated 24 Jul 2020 prepared by Todoroski Air Sciences including the Emissions Testing Report October 2013 Stack 5 and 6 dated 22 November 2013 prepared by AECOM. as amended by the Weston Aluminium Facility Emission Reconfiguration Modification Report dated 9 March 2021 prepared by AECOM and the letter dated 29 July 2021 prepared by Todoroski Air Sciences.

If there is any inconsistency between the above, the conditions of this approval shall prevail to the extent of any inconsistency.

3. The Applicant shall comply with any reasonable requirement/s of the [Planning Secretary](#) arising from the Department's assessment of:
 - a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this approval; and
 - b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.
4. Prior to each of the events listed below, or within such period otherwise agreed by the [Planning Secretary](#), the Applicant shall certify in writing to the satisfaction of the [Planning Secretary](#), that it has complied with all conditions of this consent applicable prior to that event:
 - a) commencement of any physical works associated with the development; and
 - b) commencement of operations.

Limits on Approval

- ~~5. The Applicant shall not process on site more than a combined total of 40,000 tonnes of dross aluminium and Second Cut SPL and 35,000 tonnes of scrap aluminium metal per year.~~
- ~~5. The Applicant shall not process on site more than a combined total of 40,000 tonnes of dross aluminium and SPL and 35,000 tonnes of scrap aluminium metal per year.~~
5. The Applicant shall not process on site more than a combined total of 40,000 tonnes of dross aluminium, SPL and illicit and pharmaceutical waste and 35,000 tonnes of scrap metal aluminium per year.

- 5A The Applicant shall not process on site more than 2,000 tonnes of pharmaceutical waste and 5 tonnes of illicit drug wastes per year.
- 5B No more than 5 % by mass of pharmaceutical and illicit drug waste is to be co-processed with Aluminium Dross and/or SPL in the furnaces.
- 5C The Applicant must not process liquid pharmaceutical or illicit drug waste unless approval is granted by the EPA.
6. The Applicant shall not process more than 15,000 tonnes per year of dross aluminium sourced from overseas smelters and secondary aluminium processors.
- ~~6A The Applicant shall ensure that the combined total of Second Cut SPL and aluminium dross stored on site does not exceed 5,000 tonnes at any time.~~
- 6A The Applicant shall ensure that the combined total of SPL and aluminium dross stored on site does not exceed 5,000 tonnes at any time.
- 6B The Applicant shall ensure that DA-86-04-01 Mod 8:
- is undertaken over a period of 12 months only; and
 - during the operation of DA-86-04-01 Mod 8:
 - no more than 3,000 tonnes of mixed spent potlining material is received on site over the 12 month trial period; and
 - no more than 1,000 tonnes of mixed SPL is stored on site at any one time.
- 6C The Applicant shall ensure that DA 86-04-01 Mod 9:
- is undertaken over a trial period of not more than 24 consecutive months only; and
 - during the operation of DA 86-04-01 Mod 9:
 - no more than 200 tonnes of illicit drug waste is received or processed on site over the 24 month trial period; and
 - no more than 1,000 tonnes of pharmaceutical waste is received, stored or processed on site over the 24 month trial period.

Management Plans/Monitoring Programs

7. With the approval of the [Planning Secretary](#), the Applicant may submit any management plan or monitoring program required by this approval on a progressive basis.

Structural Adequacy

8. Within six months of the commencement of DA-86-04-01-Mod 3, the Applicant shall obtain and provide copies of all necessary building certificate(s) from Cessnock City Council to the [Planning Secretary](#), for the following works:
- extension of the ALDEX building;
 - eight dross storage bays within the ALDEX building;
 - pre-processing plant within the ALDEX building;
 - annex to the Plant Building;
 - covered conveyor between the ALDEX building and the Plant Building;
 - Workshop in the north-western corner of the site; and
 - Stack 6.
9. The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the Building Code of Australia.

Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

Operation of Plant and Equipment

10. The Applicant shall ensure that all plant and equipment used on the site is maintained and operated in an efficient manner, and in accordance with relevant Australian Standards.

Spent Potlining Material Processing Trial

- ~~10.A Prior to the commencement of the Spent Potlining Material Processing Trial, the Applicant must:~~
- ~~obtain an updated EPL allowing the Spent Potlining Material Processing Trial to proceed; and~~
 - ~~notify the Planning Secretary, Council and EPA's Regional Manager Hunter in writing, 1 week prior to the commencement of the and within 2 days of the conclusion of the trial.~~

Extended Spent Potlining Material Processing Trial

- ~~10.A. Prior to the commencement of the extended Spent Potlining Material Processing Trial, the Applicant must:~~
- ~~a) obtain an updated EPL allowing the Spent Potlining Material Processing Trial to proceed; and~~
 - ~~b) notify the Planning, Council and EPA's Regional Manager Hunter in writing, 1 week prior to the commencement of the trial and within 2 days of the conclusion of the trial.~~
- 10A. Prior to the commencement of the DA-86-04-01 Mod 8, the Applicant must:
- a) obtain an updated EPL allowing DA-86-04-01 Mod 8 to proceed; and
 - b) notify the [Planning Secretary](#), Council and the EPA's Regional Manager Hunter in writing, 1 week prior to the commencement of DA-86-04-01 Mod 8 and within 2 days of the conclusion of the trial.

Illicit Drug Waste and Pharmaceutical Waste Processing Trial (DA 86-04-01 Mod 9)

- 10B. Prior to the commencement of DA 86-04-01 Mod 9, the Applicant must:
- a) obtain an updated EPL allowing DA 86-04-01 Mod 9 to proceed; and
 - b) notify the [Planning Secretary](#), Council and the EPA's Regional Manager Hunter in writing, two weeks prior to the commencement of DA 86-04-01 Mod 9 and within two weeks of the conclusion of the trial.

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

AIR

Emission Limits

11. ~~The Applicant shall ensure that the emissions from discharge points serving the facility do not exceed the emission limits in Table 1.~~

Table 1: Air Emission Limits

Parameter/ Pollutant	Unit of Measure	100% Limit	Discharge Point ¹
Nitrogen Oxides	grams per cubic metre	2.5	1
		0.1	6, 13
Hydrogen Chloride	milligrams per cubic metre	400	1
		10	13
Solid Particles	milligrams per cubic metre	25	1
		35	2
		20	3
		15	7
		24	4
	kilograms per hour	5.43	6, 13
Sulfuric acid mist and sulfur trioxide (as SO ₃)	milligrams per cubic metre	100	1, 6, 13
Carbon monoxide	parts per million	100	1
	milligrams per cubic metre	125	6
		125 ²	13
Gaseous fluoride	milligrams per cubic metre	2	1
	milligrams per cubic metre	1.4 ²	1
	kilograms per hour	0.25	Total plant emissions
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	10	1
		5	13
Volatile organic compounds	milligrams per cubic metre	77 ³	13
		40	6
Dioxins & Furans	nanograms per cubic metre	0.1 ⁴	13
Cyanide	Milligrams per cubic metre	0.5	1

Notes: _____

1. ~~Discharge points 1, 2, 3, 4, and 13 as defined in the EPL. Discharge points 6 and 7 as defined in the SEE.~~
2. ~~Limit value is a rolling 1 hour average.~~
3. ~~Limit value is a rolling 1 hour average. VOC as n-hexane (dry, 273 K, 101.3 kPa).~~
4. ~~Limit value is a rolling annual average. Polychlorinated-dibenzo-p-dioxins (PCDD) and polychlorinated-dibenzofurans (PCDF) as 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD) equivalent calculated in accordance with the procedures included in Part 4, Clause 29 of the Protection of the Environment Operations (Clean Air) Regulation 2002, (dry, 273 K, 101.3 kPa).~~

Monitoring

12. ~~Unless EPA specifies otherwise, the Applicant shall monitor the concentration of each parameter specified in Table 2 at the discharge points serving the facility.~~

Table 2: Source Emissions Monitoring Requirements

Pollutant/ Parameter	Units of Measure	Frequency	Discharge Point ¹
Carbon monoxide	parts per million	Yearly	1
Gaseous fluoride	milligrams per cubic metre	Continuous	1
Hydrogen chloride	milligrams per cubic metre	Yearly	1

¹ EPA General Term of Approval

² EPA General Term of Approval

		Quarterly	6, 13
Nitrogen Oxides	milligrams per cubic metre	Yearly	1, 6, 13
Solid Particles	milligrams per cubic metre	Yearly	1, 2, 3, 4, 7
		Quarterly	6, 13
Sulfuric acid mist and sulphur trioxide (as SO ₃)	milligrams per cubic metre	Yearly	1, 6, 13
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly	1, 6, 13
Dioxins & Furans	milligrams per cubic metre	Quarterly	6, 13
Fluorides	milligrams per cubic metre	Yearly	6, 13
Volatile organic compounds	milligrams per cubic metre	Quarterly	6, 13
Velocity	metres per second	Quarterly	6, 13
Volumetric flow rate	Normal cubic metres per second	Quarterly	6, 13
Dry gas density	kilograms per cubic metre	Quarterly	6, 13
Moisture content in stack gases	percent	Quarterly	6, 13
Temperature	Degrees Celsius	Quarterly	6, 13
Oxygen in stack gases	percent	Quarterly	6, 13
Cyanide	milligrams per cubic metre	Special Frequency 1	4

Notes: —

1. — Discharge points 1, 2, 3, 4, and 13 as defined in the EPL. Discharge points 6 and 7 as defined in the SEE.

2. — The EPA will specify the sampling methods for this monitoring in the EPL for the development.

3. — Where Special frequency 1 means quarterly testing frequency for the first year of SPL processing operations. Following four consecutive tests demonstrating compliance with the concentration limit and stable emission parameters, the licensee can apply to EPA for a reduced monitoring frequency.

- 11 The Applicant must install and operate equipment in line with best practice to ensure that the development complies with all load limits, air quality criteria/air emission limits and air quality monitoring requirements, as specified in the EPL applicable to the site.
13. ³The Applicant shall update its existing Air Quality Monitoring Program for the development to the satisfaction of the Planning Secretary. This program must:
- be prepared in consultation with the EPA;
 - be submitted to the Planning Secretary for approval within one month from the commencement of DA-86-04-01 Mod 7-DA 86-04 01 Mod 12 Mod 14 and
 - include:
 - a program to validate the air emissions of the development, which involved carrying out monitoring of the emissions from the development;
 - mitigation measures and timeframe for their implementation in case of non-compliances with the emission limits referred to in condition 11; and
 - a program to monitor the ongoing performance of the development.
- 13A — The Applicant shall:
- ~~undertake additional Stack Testing at point 15 (as specified in EPL 6423) within 90 days from the commencement of DA-86-04-01 Mod 5;~~
 - ~~submit a report which contains the results of the stack testing to the Planning Secretary and EPA; and~~
 - ~~describe, in the report, actions that will be implemented to ensure compliance with air emission limits for Stack 7 if air emission limits referred to in condition 11 are exceeded.~~
- 13A Within 12 months of commencement of DA 08-04-01 MOD 12, the Applicant must prepare, to the satisfaction of the Planning Secretary, and submit to the EPA, an Air Emissions Verification Report. The Air Emissions Verification Report must include:
- air emission sampling results undertaken for the previous 12 months;
 - a comparison of the emission sampling results against the discharge limits specified for point 1 in the EPL for the site; and
 - the approach, including timeframe for implementation, to resolve any non-compliances with the EPL and the Protection of the Environment Operations (Clean Air) Regulation 2010.
14. ⁴The Applicant shall ensure that discharge points serving the facility are designed, constructed and operated generally in accordance with the parameters outlined in the EPL for the Development.

³ EPA General Term of Approval

⁴ EPA General Term of Approval

Construction

15. During construction, the Applicant shall ensure that:
- all trucks entering or leaving the site with loads have their loads covered;
 - trucks associated with the development do not track dirt onto the public road network; and
 - the public roads used by these trucks are kept clean.

Operation

16. The Applicant shall implement all reasonable and feasible measures to minimise the dust generated by the development.
17. Within three months of the commencement of DA-86-04-01-Mod 3, the Applicant shall isolate each of the eight dross storage bays by curtains to improve the collection efficiency of dust from the localised area.
18. Within 6 months of the commencement of DA-86-04-01-Mod 3, the Applicant shall certify to the [Planning Secretary](#) that it has installed and commenced the operation of bag house No 7 in accordance with the SEE.
19. Within 9 months of the commencement of DA-86-04-01-Mod 3, the Applicant shall certify to the [Planning Secretary](#) that it has installed and commenced the operation of bag house No 3 in accordance with the SEE, should the air quality monitoring referred to in condition 13 indicate that the air emission limit for BH No 7 referred to in condition 11 is exceeded.
20. Within 6 months of the commencement of DA-86-04-01-Mod 3, the Applicant shall certify to the [Planning Secretary](#) that bag house No 2 has being detached from the ALDEX building and is servicing the dross storage area in the Plant Building only.
21. ⁵The Applicant must maintain a continuous fluoride emission monitoring system, which in the event that the concentration of fluoride emitted to atmosphere exceeds the limit value of 1.4 milligrams per cubic metre must activate visible and audible alarms.
22. ⁶If the one hour average concentration of gaseous fluoride emitted to atmosphere exceeds 1.4 milligrams per cubic metre at discharge point 1, then the plant or the section of the plant where the exceedance occurred, must cease operating until the Applicant is able to ensure compliance with the emission limits specified in the EPL for the Development.
23. ⁷A continuous recording and alarmed bag leak detector must be installed in each stack servicing the facility, excluding the stack 6, with calibration to detect bag failure. The results shall be included in the annual report required under condition 58 of this consent. In the event of a bag failure the failed bag shall be repaired or replaced as soon as possible within the current operational cycle.

23A The Applicant must ensure all SPL is appropriately bunded and covered to prevent the emission of SPL dust, flammable gases and the contamination of stormwater

Health Impact Assessment

24. The Applicant shall participate and implement recommendations from any regional Health Impact Assessment to the satisfaction of the [Planning Secretary](#).

SOIL AND WATER

Discharge Limits

25. ⁸Except as may be expressly provided in an EPL for the development, the Applicant shall comply with Section 120 of the *Protection of the Environment Operations Act 1997*.

25A All pharmaceutical waste must be stored in an enclosed (appropriately bunded and covered) area to prevent the contamination of stormwater.

Erosion and Sediment Control

26. Prior to commencement of construction, the Applicant shall implement erosion and sediment controls in accordance with the Department of Housing and Landcom's *Managing Urban Stormwater: Soils and Construction*.

⁵ EPA General Term of Approval

⁶ EPA General Term of Approval

⁷ EPA General Term of Approval

⁸ EPA General Term of Approval

27. The Applicant shall prepare and implement its Erosion and Sediment Control Plan, Site Rehabilitation Plan and Water Management Plan detailing monitoring requirements and measures to control runoff from the site, contain spillages, minimise stormwater contamination, and dispose of contaminated water and process effluent. These plans shall be submitted to Council and EPA for approval prior to the commencement of construction of the development.

NOISE

Operating Hours

28. ⁹The Applicant shall comply with the restrictions in Table 3, unless otherwise agreed by the Planning Secretary.

Table 3: Construction Hours for the Development

Activity	Day	Time
Construction	Monday – Friday	7:00am to 6:00pm
	Saturday	8:00am to 1:00pm
	Sunday and Public Holidays	Nil

Note: Construction activities may be conducted outside the hours in Table 3 provided that the activities are not audible at any residence beyond the boundary of the site.

Noise Limits

29. ¹⁰The Applicant shall ensure that the noise from the operation of the development does not exceed the noise limits presented in Table 4.

Table 4: Development Noise Limits (dB(A))

Location	Daytime	Evening		Night time		
	L _{Aeq} (15 minute) (dB(A))	L _{Aeq} (15 minute) (dB(A))	L _{Aeq} (evening) (dB(A))	L _{Aeq} (15 minute) (dB(A))	L _{Aeq} (night) (dB(A))	L _{Aeq} (1 minute) (dB(A))
Residences at the corner of Government Street and 10 th Street	48	48	40	47	35	57
Residences on Northcote Street	44	44	-	44	40	57
Residences in the Light Industrial Zone on Mitchell Avenue and Railway Road	43	43	-	43	41	55

Note: Condition 30 of this consent does not impose maximum allowable noise limits for residences on Horton Road and McCarva Road as the Applicant has established a negotiated agreement with the landowner of those properties in regard to noise.

Operating Conditions

30. ¹¹The Applicant shall ensure that trucks are not entering and leaving the site outside the hours of 7.00am to 10.00pm.

30A All doors adjacent the briquetting plant are to be closed at all times

Noise Monitoring

31. ¹²The Applicant shall prepare and implement a Noise Monitoring Program, in consultation with the EPA. The Program shall be submitted for the approval of the Planning Secretary within three months of the commencement of operation of the development, and must include a noise monitoring protocol to evaluate compliance with development noise limits specified in Condition 28 and management measures to address any exceedances.

31A If noise limits specified in Condition 28 are exceeded as a result of the briquetting plant modification, the Applicant shall fully enclose the concrete slab on the southern side of the Aldex building to the satisfaction of the Planning Secretary.

HAZARDS

⁹ EPA General Term of Approval

¹⁰ EPA General Term of Approval

¹¹ EPA General Term of Approval

¹² EPA General Term of Approval

Pre-construction Studies

32. At least one month prior to construction of the development (except for construction of preliminary works that are outside the scope of the hazard studies), the Applicant shall submit for the approval of the Director General, the following studies:
- a) a Hazard and Operability Study for the process operations and fuel supply. This shall include the rotary cooler cooling water system, safeguards for hydrogen fluoride release, rotary furnaces and holding furnaces. The study shall be chaired by an independent qualified person approved by the [Planning Secretary](#);
 - b) a Final Hazards Analysis (FHA) prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.6 'Guidelines for Hazard Analysis'*; and
 - c) arrangements covering the transport of hazardous materials including details of routes to be used for the movement of trucks. Further, the applicant shall enter into contractual arrangements with contract drivers to require the use of routes determined under this condition except where necessary for local deliveries. This should include a management plan and emergency procedures.

Pre-commissioning Studies

33. At least two months prior to commissioning of the development, the Applicant shall prepare and submit for the approval of the [Planning Secretary](#) a Preliminary Hazards Implementation Update, certifying that the recommendations made in following studies have been fully implemented:
- a) Dross Processing Plant Additions at Weston Kurri Kurri, NSW - Preliminary Hazard Analysis, prepared by Granherne and dated 25 October 1999; and
 - b) Proposed Additional Facilities at the Weston Dross Processing Plant Weston, NSW - Molten Metal Transportation Risk Assessment.

Where it has been decided not to implement a particular recommendation, the reasons shall be clearly stated.

Pre-operation Emergency Services Cooperation Agreement

34. Prior to the commencement of operation of the development, the Applicant shall develop an Emergency Services Cooperation Agreement in consultation with the emergency response teams relevant to the site and proposed haulage routes for molten aluminium ([NSW Fire and Rescue](#), State Emergency Services and local bushfire fighting services, where relevant). The Agreement shall provide, but not necessarily be limited to:
- a) policies and procedures for the on-going supply of hazards information to the emergency response teams in relation to the site, molten aluminium transport and dross transport, including quantities and locations of hazardous materials and possible hazardous events associated with the site and dross/ molten aluminium haulage;
 - b) policies and procedures for communication with the emergency response teams, and notification in the event of an emergency;
 - c) any agreement for access to water stores at the development in the event of a bushfire; and
 - d) any agreement for the provision of suitably qualified and appropriately trained employees from the site to assist where relevant in the event of a bushfire or emergency.

The Emergency Services Cooperation Agreement shall be consistent with the Emergency Plan required under this consent. The Applicant shall supply a copy of the Emergency Services Cooperation Agreement to the [Planning Secretary](#) prior to the commencement of operation.

Dross Importation Protocol

35. Dross sourced from overseas smelters and secondary aluminium processors must be inspected prior to processing in accordance with the Inspection Protocol for Imported Dross, approved by the Land and Environment Court on 7 April 2000.

Dangerous Goods

36. The Applicant shall store and handle all dangerous goods, as defined by the Australian Dangerous Goods Code, strictly in accordance with:
- a) all relevant Australian Standards;
 - b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
 - c) the [EPA's](#) Environment Protection Manual Technical Bulletin *Bundling and Spill Management*.

Emergency Stop System

37. At the commencement of DA-86-04-01-Mod 3, The Applicant shall have in operation emergency stop systems in ALDEX and Plant buildings, including a temperature sensor and an alarm, in the event of a fire.

TRANSPORT

Road Network and Parking

38. The Applicant shall ensure that that haulage of molten aluminium is via Main Road 588 (Renshaw Drive) when travelling towards the Sydney- Newcastle Freeway (F3), rather than via Main Road 195 (Kurri Kurri-Mulbring Road) and Main Road 220 (Lake Road).
39. The Applicant shall ensure that all parking generated by the development is accommodated on site. No vehicles associated with the development shall park on the public road system at any stage.

Vehicle Queuing

40. During the development, the Applicant shall ensure that the development does not result in any vehicles queuing on the public road network.

Transport Code of Conduct

41. Prior to the commencement of operation of the development, the Applicant shall submit for the approval of the [Planning Secretary](#) a Transport Code of Conduct to outline management of traffic impacts associated with the site and minimum requirements for the movement of heavy vehicles to and from the site. The Code shall meet the requirements of Council and the RTA, should there be any. The Code shall include, but not necessarily be limited to:
 - a) restrictions to routes, consistent with condition 37 of this consent;
 - b) restrictions to the hours of transport operations, consistent with condition 29 of this consent, to avoid travelling built-up areas late at night or at times of high traffic flows in those areas;
 - c) speed limits to be observed along routes to and from the site, in particular through built-up areas;
 - d) minimum requirements for vehicle maintenance to address noise and exhaust emissions;
 - e) load coverage requirements; and
 - f) behavioural requirements for vehicle drivers.

VISUAL

Lighting

42. The Applicant shall ensure that the lighting associated with the development:
 - a) complies with the latest version of Australian Standard AS 4282(*INT*) - *Control of Obtrusive Effects of Outdoor Lighting*; and
 - b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

Landscape Management Plan

43. The Applicant shall prepare a Landscape Management Plan in consultation with Council prior to the commencement of construction of the development and provide details of existing and proposed tree and shrub species, finish of exposed surfaces (including paved areas), and outline a program for implementation.

WASTE

Operating Conditions

44. ¹³The Applicant shall ensure that all waste generated on the site during construction and operation of the development is classified in accordance with the [EPA's](#) Waste Classification Guidelines and disposed of to a facility that may lawfully accept the waste.
45. ¹⁴Except as expressly permitted by an EPL, the Applicant shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing or disposal, or any waste generated at the site to be disposed of at the site.

Waste Recycling Investigation

46. The Applicant shall investigate recycling options for ash and fume wastes and submit findings to Council and [EPA](#) within 12 months of the commissioning of the development, and every 12 months thereafter, until a feasible recycling alternative is found and implemented.
47. The Applicant shall maximise on site waste recycling, in particular packaging materials, paper and any other such wastes.

¹³ EPA General Term of Approval

¹⁴ EPA General Term of Approval

FLORA AND FAUNA

48. The Applicant shall not clear any native vegetation beyond the limits defined in Figure 4.1 of Additions to the *Kurri Kurri Aluminium Refining and Recycling Facility - Volume II Construction Environmental Plan*, prepared by URS and dated 23 April 2001.
49. Clearing for the development shall be restricted to areas of the site covered by the Angophora/Stringybark/Grey Gum community. The Forest Red Gum, (*Eucalyptus tereticornis*) community shall be preserved for its habitat value and ecological significance.
50. The Typha swamp in the north-western corner of the site and Swamp Creek (and its associated drainage lines) shall be protected from siltation by appropriate means detailed in the Erosion and Sediment Control Plan.
51. The Applicant shall implement a program to minimise the presence and spread of weeds, in particular camphor laurel, on the site.

ABORIGINAL CULTURAL HERITAGE

52. In the event that Aboriginal objects are uncovered during the course of the development, the Applicant shall cease all works in the immediate areas, notify the EPA and implement any reasonable and feasible measures recommended by the EPA.

GREENHOUSE GAS

Energy Savings Action Plan

53. The Applicant shall prepare and implement an Energy Savings Action Plan for the development to the satisfaction of the Planning Secretary. This plan must be prepared in accordance with the requirements of the EPA and the *Guidelines for Energy Savings Action Plans, DEUS 2005*, and be submitted to the Planning Secretary for approval within six months from the commencement of DA-86-04-01-Mod 3.

Monitoring and Reporting

54. The Applicant shall, to the satisfaction of the Planning Secretary:
 - a) monitor the greenhouse gas emissions generated by the development;
 - b) investigate ways to reduce greenhouse gas emissions generated by the development; and
 - c) report on greenhouse gas monitoring and abatement measures and energy efficiency measures identified in the Energy Savings Action Plan.

EXTENDED SPENT POTLINING MATERIAL PROCESSING TRIAL

Monitoring and Verification Reporting

- ~~54A For the duration of the Spent Potlining Material Processing Trial, the Applicant must:~~
- ~~b) monitor and record, air emissions, including cyanide, hydrogen cyanide, fluoride, particulates and all pollutants and parameters specified in the EPL;~~
 - ~~c) monitor and record all processing conditions for the trial, including:
 - ~~i. the quantity and characteristics of all inputs;~~
 - ~~ii. the processing methods, including the rotary furnace temperature profile and the duration of thermal treatment;~~~~
 - ~~d) undertake real time monitoring of fluoride and particulate emissions and immediately cease processing, and notify EPA and the Planning Secretary, should any exceedance of the limits in the EPL occur;~~
 - ~~e) ensure all spent potlining material is appropriately bunded and covered to prevent the emission of spent potlining dust, flammable gases and the contamination of stormwater.~~
- ~~54A For the duration of the Extended Spent Potlining Material Processing Trial, the Applicant must:~~
- ~~a) monitor and record, air emissions, including cyanide, hydrogen cyanide, fluoride, particulates and all pollutants and parameters specified in the EPL;~~
 - ~~b) cease processing, and notify the EPA and the Planning Secretary, should laboratory results indicate emissions of cyanide are greater than 0.09 mg/m3;~~
 - ~~c) monitor and record all processing conditions for the trial, including:
 - ~~i. the quantity and characteristics of all inputs;~~
 - ~~ii. the processing methods, including the rotary furnace temperature profile and the duration of thermal treatment;~~~~
 - ~~d) undertake real time monitoring of fluoride and particulate emissions and immediately cease processing, and notify the EPA and the Planning Secretary, should any exceedance of the limits in the EPL occur;~~
 - ~~e) ensure all spent potlining material is appropriately bunded and covered to prevent the emission of spent potlining dust, flammable gases and the contamination of stormwater.~~

- 54A. For the duration of the DA-86-04-01 Mod 8, the Applicant must:
- monitor and record, air emissions, including cyanide, hydrogen cyanide, fluoride, particulates and all pollutants and parameters specified in the EPL;
 - cease processing, and notify the EPA and the [Planning Secretary](#), should laboratory results indicate emissions of cyanide are greater the limits in the EPL or the *Protection of the Environment Operations (Clean Air) Regulation 2010*;
 - monitor and record all processing conditions for the trial, including:
 - the quantity and characteristics of all inputs;
 - the processing methods, including the rotary furnace temperature profile and the duration of thermal treatment; and
 - undertake real-time monitoring of fluoride and particulate emissions and immediately cease processing, and notify the EPA and the [Planning Secretary](#), should any exceedance of the limits in the EPL occur.
- ~~54B The Applicant must prepare a detailed monitoring report, on the outcomes of the Spent Potlining Material Processing Trial, to the satisfaction of EPA and the Secretary. The report must:~~
- ~~be submitted to EPA, Council and the Secretary within 90 days of the completion of the Spent Potlining Material Processing Trial;~~
 - ~~detail the results of the monitoring required in condition 0 above;~~
 - ~~compare the results of the trial to the laboratory results described in the report dated 30 April 2010 prepared by K2 Environmental Limited, the limits in the EPL and EPA's air quality impact assessment criteria specified in the "Approved Methods for the Modelling and Assessment of Air Pollutants in NSW" (DEC 2005);~~
 - ~~describe any anomalies in the monitoring data, and any exceedances of the limits or assessment criteria;~~
 - ~~characterise the trial outputs and describe how these products are to be managed and disposed of, demonstrating compliance with condition 44;~~
 - ~~summarise the findings of the trial;~~
 - ~~recommend any actions that could be taken to minimise emissions during any future processing; and~~
 - ~~discuss the likely options for any future processing.~~
- ~~54B The Applicant must prepare a detailed monitoring report, on the outcomes of the Extended Spent Potlining Material Processing Trial, to the satisfaction of EPA and the Secretary. The report must:~~
- ~~be submitted to EPA, Council and the Secretary within 90 days of the completion of the Extended Spent Potlining Material Processing Trial;~~
 - ~~detail the results of the monitoring required in condition 0 above;~~
 - ~~compare the results of the trial to the laboratory results described in the report dated 30 April 2010 prepared by K2 Environmental Limited, the limits in the EPL and EPA's air quality impact assessment criteria specified in the "Approved Methods for the Modelling and Assessment of Air Pollutants in NSW" (DEC 2005);~~
 - ~~describe any anomalies in the monitoring data, and any exceedances of the limits or assessment criteria;~~
 - ~~characterise the trial outputs and describe how these products are to be managed and disposed of, demonstrating compliance with condition 44;~~
 - ~~summarise the findings of the trial;~~
 - ~~recommend any actions that could be taken to minimise emissions during any future processing; and~~
 - ~~discuss the likely options for any future processing.~~
- 54B The Applicant must prepare a detailed monitoring report, on the outcomes of DA-86-04-01 Mod 8, to the satisfaction of the EPA and the [Planning Secretary](#). The report must:
- be submitted to EPA, Council and the [Planning Secretary](#) within 90 days of the completion of DA-86-04-01 Mod 8;
 - detail the results of the monitoring required in condition 54A above;
 - compare the results of the trial to, the limits in the EPL and the EPA's air quality impact assessment criteria specified in the *"Approved Methods for the Modelling and Assessment of Air Pollutants in NSW"* (DEC 2005);
 - describe any anomalies in the monitoring data, and any exceedances of the limits or assessment criteria;
 - characterise the trial outputs and describe how these products are to be managed and disposed of, demonstrating compliance with condition 44;
 - summarise the findings of the trial;
 - recommend any actions that could be taken to minimise emissions during any future processing; and
 - discuss the likely options for any future processing.
- 54C For the duration of the DA 86-04-01 Mod 9, the Applicant must:
- monitor and record, air emissions and all pollutants and parameters specified in the EPL. All air quality monitoring must occur on a quarterly basis and whenever Pharmaceutical and Illicit Drug Waste material is being processed;
 - ensure air quality emissions testing is completed in accordance with the EPA's Approved Methods for Sampling and Analysis of Air Pollutants in NSW

- c) cease processing, and notify the EPA and the Planning Secretary, should laboratory results indicate emissions are greater the limits in the EPL or the *Protection of the Environment Operations (Clean Air) Regulation 2010*;
- d) monitor and record all processing conditions for the trial, including:
 - i. the names, contact details and qualifications and experience of the person(s) conducting and supervising the trial;
 - ii. the source facility, a description of the waste type, amount and date received of each load of waste accepted for disposal as part of the trial;
 - iii. all process conditions for the trial including the quantity of pharmaceutical and/or illicit drug waste in each batch processed, any other materials/additives processed in each batch, the temperature profile of the furnace during each batch processed and the residence time of the material within the furnace; and
 - iv. undertake real-time monitoring of fluoride and particulate emissions and immediately cease processing, and notify the EPA and the Planning Secretary, should any exceedance of the limits in the EPL occur.

54D The Applicant must prepare a detailed monitoring report, on the outcomes of DA 86-04-01 Mod 9, to the satisfaction of the EPA and the Planning Secretary. The report must:

- a) be submitted to EPA, Council and the Planning Secretary within 90 days of the completion of DA 86-04-01 Mod 9;
- b) detail the results of the monitoring required in condition 54C above;
- c) compare the results of the trial to, the limits in the EPL and the EPA's air quality impact assessment criteria specified in the "Approved Methods for the Modelling and Assessment of Air Pollutants in NSW" (DEC 2005);
- d) describe any anomalies in the monitoring data, and any exceedances of the limits or assessment criteria;
- e) characterise the trial outputs and describe how these products are to be managed and disposed of, demonstrating compliance with condition 44;
- f) summarise the findings of the trial;
- g) recommend any actions that could be taken to minimise emissions during any future processing; and
- h) discuss the likely options for any future processing.

Processing of Pharmaceutical and Illicit Drug Waste

- 54E Should approval be granted by the EPA in accordance with Condition 5C, liquid waste must be charged to the suitably hot furnace:
 - a) after the molten aluminium is tapped out; and
 - b) at the beginning of the next charge, prior to the addition of solid aluminium dross.
- 54F For the duration of the DA 86-04-01 Mod 12, the Applicant must monitor all processing conditions, the quantity and characteristics of all inputs and processing methods, including the rotary furnace operating profile and the duration of thermal treatment.
- 54G 12 months after the commencement of operation of DA 86-04-01 Mod 12 the Applicant must prepare a detailed monitoring report, on the outcomes of operation, to the satisfaction of the Planning Secretary. The report must:
 - a) detail the results of the monitoring required in condition 54F; and
 - b) include a tracking summary of the implementation and monitoring of mitigation measures as listed under Hazards and Risk, Table 15 Summary of Management Measures of the EA and included in Appendix B

SCHEDULE 4 ENVIRONMENTAL MANAGEMENT AND MONITORING

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

55. The Applicant shall implement the following Plans for the development:
- Additions to the Kurri Kurri Aluminium Refining and Recycling Facility - Volume II Construction Environmental Management Plan, prepared by URS and dated 23 April 2001;
 - Additions to the Kurri Kurri Aluminium Refining and Recycling Facility - Volume II Construction Environmental Management Plan Appendices, prepared by URS and dated 23 April 2001; and
 - Construction Safety Study, prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 7 - Construction Safety Study Guidelines*.

55A The Applicant must prepare and implement a Construction Environmental Management Plan for the duration of the construction of DA 86-04 01 Mod 14,

OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN

56. The Applicant shall update the following Plans/Studies to reflect the requirements of this consent and submit the amended Plans for the approval of the [Planning Secretary](#) within three months from the commencement of DA-86-04-01-Mod 3:
- Additions to the Kurri Kurri Aluminium Refining and Recycling Facility - Volume III Operational Environmental Management Plan, prepared by URS and dated 23 April 2001;
 - Additions to the Kurri Kurri Aluminium Refining and Recycling Facility - Volume III Operational Environmental Management Plan Appendices, prepared by URS and dated 23 April 2001;
 - Fire Safety Study prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 2 'Fire Safety Study Guidelines'* and the New South Wales Government's *Best Practice Guidelines for Contaminated Water Retention and Treatment Systems*. The study shall also be submitted to the NSW Fire Brigade for approval;
 - Emergency Plan detailing emergency procedures for the development, including detailed procedures for the safety of people outside of the development who may be at risk from the development. The Emergency Plan must be prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 1 'Industry Emergency Planning Guidelines'*; and
 - Safety Management System covering all on-site operations and associated transport activities involving hazardous materials. The Safety Management System must specify all safety related procedures, responsibilities and policies, along with mechanisms for ensuring adherence to the procedures.

~~56A The Applicant shall update the studies required in Conditions 56 c), d) and e), above to reflect the requirements of this consent. The Applicant shall submit the amended Plans for the approval of the Secretary within three months from the commencement of DA 86-04-01 Mod 7.~~

56A Within three months of each of the modifications listed below, the Applicant shall submit, for approval of the [Planning Secretary](#), the relevant updated studies (as required by Condition 56 and described in table 5) to reflect the requirements of that modification.

Modification	Plans
DA 86-04-01 Mod 7	56 c, d and e
DA 86-04-01 Mod 9	56 d and e
DA 86-04-01 Mod 12	56 d and e

~~56B The Applicant shall prepare a Security Protocol for the management of pharmaceutical drug waste. The Protocol shall:~~

- ~~be implemented for the duration of DA 86-04-01 Mod 9;~~
- ~~be incorporated into the updated Safety Management System required by Condition 56B;~~
- ~~describe the measures to be undertaken to ensure the secure transport, storage and processing of pharmaceutical waste; and~~
- ~~include the security measures described in the Response to Submissions Report dated 15 July 2015.~~

56B The Applicant shall update the Safety Management System covering all on-site operations and security protocols for the storage, transport and incineration of pharmaceutical and illicit drug waste.

POST-STARTUP COMPLIANCE REPORT

~~56C Three months after the commencement of operation of DA 86-04-01 Mod 9, the Applicant shall submit to the Planning Planning Secretary, a report verifying that:~~

- ~~a) the updated Emergency Plan required under condition 56B is effectively in place and that at least one emergency exercise has been conducted; and~~
- ~~b) the updated Safety Management System required under condition 56B has been fully implemented and that records required by the system are being kept.~~

- 56C Six months after the commencement of operation of DA 10397 of 1995 MOD 10, the Applicant shall submit to the Planning Secretary, a report verifying that:
- a) the updated site Emergency Plan required under condition 56 is effectively in place; and
 - b) the updated Safety Management System required under condition 56 has been fully implemented and that records required by the system are being kept.

ENVIRONMENTAL REPORTING

Incident Reporting

57. ~~Within 24 hours of detecting an exceedance of the limits/performance criteria in this approval or the occurrence of an incident that causes (or may cause) harm to the environment, the Applicant shall notify the Department and other relevant agencies of the exceedance/incident.~~
58. ~~Within 7 days of notifying the Department and other relevant agencies of an exceedance/incident, the Applicant shall provide the Department and these agencies with a written report that:~~
- ~~a) describe the date, time, and nature of the exceedance/incident;~~
 - ~~b) identify the cause (or likely cause) of the exceedance/incident;~~
 - ~~c) describe what action has been taken to date; and~~
 - ~~d) describe the proposed measures to address the exceedance/incident.~~

Annual Reporting

59. ~~Within 12 months of this approval, and annually thereafter, the Applicant shall submit an AEMR to the Secretary and relevant agencies. This report must:~~
- ~~a) identify the standards and performance measures that apply to the development;~~
 - ~~b) describe the works carried out in the last 12 months;~~
 - ~~c) describe the works that will be carried out in the next 12 months;~~
 - ~~d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;~~
 - ~~e) include a summary of the monitoring results for the development during the past year;~~
 - ~~f) include an analysis of these monitoring results against the relevant:~~
 - ~~• impact assessment criteria/limits;~~
 - ~~• monitoring results from previous years; and~~
 - ~~• predictions in the EA;~~
 - ~~g) identify any trends in the monitoring results over the life of the development;~~
 - ~~h) identify any non-compliance during the previous year; and~~
 - ~~i) describe what actions were, or are being, taken to ensure compliance.~~

AUDITING

Independent Environmental Audit

60. ~~Within 12 months of the commencement of operations, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:~~
- ~~a) be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Secretary;~~
 - ~~b) be undertaken in consultation with EPA, and Council;~~
 - ~~c) include a Hazard Audit in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 5 — Hazard Audit Guidelines. The audit shall include a review of the Safety Management System and of all incidents recorded and be accompanied by a program for the implementation of all recommendations made in the audit report. If the Applicant intends to defer the implementation of a recommendation, justification must be included.~~
 - ~~d) assess whether the development is being carried out in accordance with industry best practice;~~
 - ~~e) assess the environmental performance of the development, and its effects on the surrounding environment and sensitive receivers;~~
 - ~~f) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;~~
 - ~~g) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,~~
 - ~~h) recommend measures or actions to improve the environmental performance of the development, and/or any strategy/plan/program required under this approval.~~

- ~~61. Within 6 weeks of completing this audit, or as otherwise agreed by the **Secretary**, the Applicant shall submit a copy of the audit report to the **Secretary** with a response to any recommendations contained in the audit report.~~
- ~~62. Within 3 months of submitting an audit report to the **Secretary**, the Applicant shall review and if necessary revise the strategy/plans/programs required under this approval to the satisfaction of the **Secretary**.~~

COMPLAINTS MANAGEMENT

- ~~63. Prior to the commencement of construction works, the Applicant shall ensure that the following are available for community complaints:~~
- ~~a) a telephone number on which complaints about operations on the site may be registered;~~
 - ~~b) a postal address to which written complaints may be sent; and~~
 - ~~c) an email address to which electronic complaints may be transmitted.~~

~~The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the site, in a position that is clearly visible to the public. These details shall also be provided on the Applicant's internet site.~~

- ~~64. The Applicant shall record details of all complaints received through the means listed under condition 62 of this consent in an up to date Complaints Register. The Register shall record, but not necessarily be limited to:~~
- ~~a) the date and time, where relevant, of the complaint;~~
 - ~~b) the means by which the complaint was made (telephone, mail or email);~~
 - ~~c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;~~
 - ~~d) the nature of the complaint;~~
 - ~~e) any action(s) taken by the Applicant in relation to the complaint, including any follow up contact with the complainant; and~~
 - ~~f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken.~~

~~The Complaints Register shall be made available for inspection by the **Planning Secretary** and/or **EPA** upon request.~~

ACCESS TO INFORMATION

- ~~65. Within 3 months of the approval of any strategy/plan/program required under this approval (or any subsequent revision of these strategies/plans/programs), or the completion of the audits or AEMRs required under this approval, the Applicant shall provide a copy of the relevant document/s to:~~
- ~~a) the relevant agencies, and~~
 - ~~b) any interested party upon request.~~

REPORTING AND AUDITING

Incident Notification, Reporting and Response

- 57 The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in **Appendix C**.

Non-Compliance Notification

- 58 The Department must be notified in writing to compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of any non-compliance.
- 59 A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.
- 60 A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Compliance Reporting

- ~~61. No later than 6 weeks before the date notified for the commencement of operation of DA 86-04-01 MOD 12, a Compliance Monitoring and Reporting Program prepared in accordance with the Compliance Reporting Post Approval Requirements (Department 2018) must be submitted to the Department.~~

~~62 Compliance Reports of the project must be carried out in accordance with the Compliance Reporting Post Approval Requirements (Department 2018).~~

- 61 Within three months after the first year of commencement of operation, and in the same month each subsequent year (or such other timing as agreed by the Planning Secretary), the Applicant must submit a Compliance Report to the Planning Secretary reviewing the environmental performance of the development to the satisfaction of the Planning Secretary. Compliance Reports must be prepared in accordance with the Compliance Reporting Post Approval Requirements (Department 2020) and must also:
- a) identify any trends in the monitoring data over the life of the development;
 - b) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - c) describe what measures will be implemented over the next year to improve the environmental performance of the development.
- 63 The Applicant must make each Compliance Report publicly available no later than 60 days after submitting it to the Department and notify the Department in writing at least 7 days before this is done.

Independent Audit

- ~~64 No later than 4 weeks before the date notified for the commencement of operation of DA 86-04-01 MOD 12, an Independent Audit Program prepared in accordance with the Independent Audit Post Approval Requirements (Department 2018) must be submitted to the Department.~~
- ~~65 Independent Audits of the development must be carried out in accordance with:~~
- ~~a) the Independent Audit Program submitted to the Department under condition 64 of this consent; and~~
 - ~~b) the requirements for an Independent Audit Methodology and Independent Audit Report in the Independent Audit Post Approval Requirements (Department 2018).~~
- 64 Within one year of the commencement of operation, and every three years after, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit (Audit) of the development. Audits must:
- a) be prepared in accordance with the Independent Audit Post Approval Requirements (Department 2020);
 - b) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary; and
 - c) be submitted to the satisfaction of the Planning Secretary within three months of commissioning the Audit (or within another timeframe agreed by the Planning Secretary).
- 65 In accordance with the specific requirements in the Independent Audit Post Approval Requirements (Department 2020), the Applicant must:
- a) review and respond to each Independent Audit Report prepared under condition 0 of this consent;
 - b) submit the response to the Planning Secretary and any other NSW agency that requests it, together with a timetable for the implementation of the recommendations;
 - c) implement the recommendations to the satisfaction of the Planning Secretary; and
 - d) make each Independent Audit Report and response to it publicly available no later than 60 days after submission to the Planning Secretary and notify the Planning Secretary in writing at least 7 days before this is done.
- 66 In accordance with the specific requirements in the Independent Audit Post Approval Requirements (Department 2018), the Applicant must:
- a) review and respond to each Independent Audit Report prepared under condition 65 of this consent;
 - b) submit the response to the Department; and
 - c) make each Independent Audit Report and response to it publicly available no later than 60 days after submission to the Department and notify the Department in writing at least 7 days before this is done.
- 67 Twelve months after the commencement of DA 86-04-01 Mod 12 and every three years thereafter, or at such intervals as the Planning Secretary may agree, the Applicant must carry out a comprehensive Hazard Audit of the development and within one month of each audit submit a report to the satisfaction of the Planning Secretary for approval.

The audits must be carried out at the Applicant's expense by a qualified person or team, independent of the development, approved by the Planning Secretary prior to commencement of the audit. Hazard Audits must be carried out in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'.

- 68 Within one month of each audit carried out in accordance with Condition 54, the Applicant must submit a report to the satisfaction of the Planning Secretary for approval. The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented. The Applicant must implement the recommendations to the satisfaction of the Planning Secretary

Monitoring and Environmental Audits

- 69 Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance reporting and independent auditing.

Note: For the purposes of this condition, as set out in the EP&A Act, “monitoring” is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an “environmental audit” is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.

ACCESS TO INFORMATION

- ~~70 Within 3 months of the approval of any strategy/plan/program required under this approval (or any subsequent revision of these strategies/plans/programs), or the completion of the audits or compliance reporting required under this approval, the Applicant shall provide a copy of the relevant document/s to:~~
- ~~a) the relevant agencies, and~~
- ~~b) any interested party upon request.~~
- 70 At least 48 hours before the commencement of construction until the completion of all works under this consent, the Applicant must:
- a) make the following information and documents (as they are obtained or approved) publicly available on its website:
- i. the documents referred to in condition **Error! Reference source not found.** of schedule 2 of this consent;
 - ii. all current statutory approvals for the development;
 - iii. all approved strategies, plans and programs required under the conditions of this consent;
 - iv. regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;
 - v. a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - vi. a summary of the current stage and progress of the development;
 - vii. contact details to enquire about the development or to make a complaint;
 - viii. a complaints register, updated monthly;
 - ix. the Compliance Report of the development;
 - x. audit reports prepared as part of any Independent Audit of the development and the Applicant’s response to the recommendations in any audit report;
 - xi. any other matter required by the Planning Secretary; and
- b) keep such information up to date, to the satisfaction of the Planning Secretary.

**APPENDIX A
SITE PLAN**

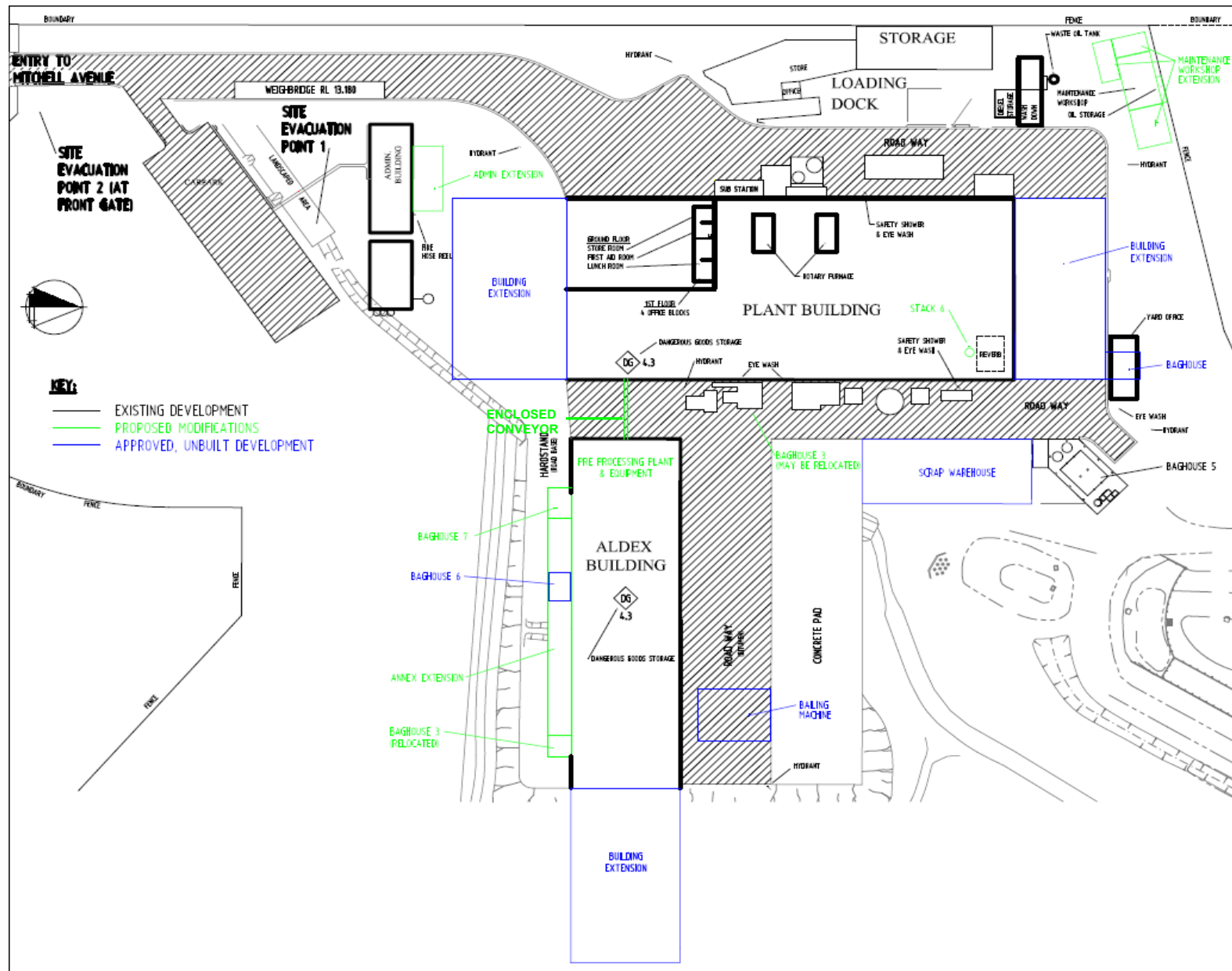


Figure 1: Site layout plan


Appendix C Incident Notification and Reporting Requirements

WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

1. A written incident notification addressing the requirements set out below must be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition 0 or, having given such notification, subsequently forms the view that an incident has not occurred.
2. Written notification of an incident must:
 - a. identify the development and application number;
 - b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
 - c. identify how the incident was detected;
 - d. identify when the applicant became aware of the incident;
 - e. identify any actual or potential non-compliance with conditions of consent;
 - f. describe what immediate steps were taken in relation to the incident;
 - g. identify further action(s) that will be taken in relation to the incident; and
 - h. identify a project contact for further communication regarding the incident.

INCIDENT REPORT REQUIREMENTS

3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
4. The Incident Report must include:
 - a. summary of the incident;
 - b. outcomes of an incident investigation, including identification of the cause of the incident;
 - c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
 - d. details of any communication with other stakeholders regarding the incident.

 Weston Aluminium Pty Ltd	AIR QUALITY MONITORING PROGRAM	Revision	12
		Page No:	31 of 31
		Prepared By:	C. McClung
		Authorised By:	C. Hall
		Issue Date:	14-03-2023

ATTACHMENT 3

Development Consent

Section 4.38 of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning under delegation executed on 11 October 2017, I approve the Development Application referred to in Schedule 1, subject to the conditions specified in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the Development.



Anthea Sargeant 12/12/18
Executive Director
Key Sites and Industry Assessments

Sydney 12 December, 2018

File: 15/7396

SCHEDULE 1

Application No:	SSD 7396
Applicant:	Weston Aluminium Pty Ltd
Consent Authority:	Minister for Planning
Site:	129 Mitchell Avenue Kurri Kurri, NSW 2326 Lot 61 in DP1237125
Development:	Construction and operation of a thermal processing facility to incinerate up to 8,000 tonnes per annum of medical, research, quarantine, pharmaceutical, illicit drug and other wastes

TABLE OF CONTENTS

DEFINITIONS	iv
PART A: ADMINISTRATIVE CONDITIONS	1
OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT	1
TERMS OF CONSENT	1
LIMITS OF CONSENT	1
Lapsing	1
Waste	1
Time Limit on Consent	1
Waste Limits	1
NOTIFICATION OF COMMENCEMENT	2
REQUEST FOR INFORMATION	2
EVIDENCE OF CONSULTATION	2
STAGING, COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS	2
PROTECTION OF PUBLIC INFRASTRUCTURE	2
DEMOLITION	3
STRUCTURAL ADEQUACY AND CERTIFICATION	3
COMPLIANCE	3
OPERATION OF PLANT AND EQUIPMENT	3
EXTERNAL WALLS AND CLADDING FLAMMABILITY	3
UTILITIES AND SERVICES	3
WORKS AS EXECUTED PLANS	3
APPLICABILITY OF GUIDELINES	3
ADVISORY NOTES	3
PART B: ENVIRONMENTAL PERFORMANCE AND MANAGEMENT	4
HUMAN HEALTH	4
AIR QUALITY	5
Dust Minimisation	5
Thermal Plant Design	5
Air Quality Discharges	5
Air Quality Management Plan	5
Odour Management	6
Post Commissioning Air Emissions Verification Report	6
HAZARDS AND RISK	6
Pre-construction Studies	6
Pre-commissioning	7
Ongoing	7
Further Requirements	7
Dangerous Goods	7
WASTE MANAGEMENT	8
Incoming Waste	8
Transportation of Waste	8
Pests, Vermin and Noxious Weed Management	8
Waste Storage and Processing	8
Waste Management Plan	8
Statutory Requirements	9
SOILS, WATER QUALITY AND HYDROLOGY	9
Imported Soil	9
Erosion and Sediment Control	9
Discharge Limits	9
Stormwater Management System	9

Flood Management.....	9
Water Management Plan.....	10
NOISE.....	10
Hours of Work.....	10
Construction Noise Limits.....	11
Operational Noise Limits.....	11
Operation.....	11
Road Traffic Noise.....	11
TRAFFIC AND ACCESS.....	11
Parking.....	11
Operating Conditions.....	11
BIOSECURITY.....	12
Biosecurity.....	12
CONTAMINATION.....	12
SECURITY.....	12
ABORIGINAL HERITAGE.....	12
Unexpected Finds Protocol.....	12
BIODIVERSITY.....	12
PART C: ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING.....	13
MANAGEMENT PLAN REQUIREMENTS.....	13
CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN.....	13
OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN.....	13
REVISION OF STRATEGIES, PLANS AND PROGRAMS.....	14
REPORTING AND AUDITING.....	14
Incident Notification, Reporting and Response.....	14
Non-Compliance Notification.....	14
Compliance Reporting.....	14
Independent Audit.....	15
Monitoring and Environmental Audits.....	15
ACCESS TO INFORMATION.....	15
Appendix 1 DEVELOPMENT LAYOUT PLANS.....	16
Appendix 2 APPLICANT'S MANAGEMENT AND MITIGATION MEASURES.....	19
Appendix 3 SENSITIVE RECEIVERS.....	20
Appendix 4 TRANSPORT ROUTE.....	21
Appendix 5 INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS.....	22

DEFINITIONS

AEP	Annual Exceedance Probability
AHD	Australian Height Datum
Applicant	Weston Aluminium, or any person carrying out any Development to which this consent applies
BCA	Building Code of Australia
Calendar year	A period of 12 consecutive months commencing 1 January
Certifying Authority	A person who is authorised by or under the former section 109D of the EP&A Act to issue Part 4A certificates
CEMP	Construction Environmental Management Plan
Conditions of this consent	Conditions contained in Schedule 2 of this document
Construction	The demolition and removal of buildings or works, the carrying out of works for the purpose of the Development, including bulk earthworks, and erection of buildings and other infrastructure permitted by this consent.
Council	Cessnock City Council
Day	The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays
Demolition	The deconstruction and removal of buildings, sheds and other structures on the site
Department	NSW Department of Planning and Environment
Development	The Development described in the EIS and Response to Submissions, including the works and activities comprising construction and operation of the Medical and Other Waste Thermal Processing Facility, as modified by the conditions of this consent.
Development layout	The plans at Appendix A of this consent
Earthworks	Bulk earthworks, site levelling, import and compaction of fill material, excavation for installation of drainage and services, to prepare the site for construction
EIS	The Environmental Impact Statement titled <i>Thermal Waste Processing Project</i> , prepared by AECOM, dated 26 August 2016, submitted with the application for consent for the Development, including any additional information provided by the Applicant in support of the application
ENM	Excavated Natural Material
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6 pm to 10 pm
Operation	The receipt or thermal treatment of waste
Heritage	Encompasses both Aboriginal and historic heritage including sites that predate European settlement, and a shared history since European settlement
Heritage item	An item as defined under the <i>Heritage Act 1977</i> , and assessed as being of local, State and/ or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i> , the World Heritage List, or the National Heritage List or Commonwealth Heritage List under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth), or anything identified as a heritage item under the conditions of this consent
Hunter New England Population Health Incident	HNEPH
Land	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance Note: "material harm" is defined in this consent
Material harm	Has the same meaning as the definition of the term in section 1.4 of the EP&A Act Is harm that: <ul style="list-style-type: none"> • involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or • results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be

	incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)
Minister	NSW Minister for Planning (or delegate)
Mitigation	Activities associated with reducing the impacts of the Development prior to or during those impacts occurring
Monitoring	Any monitoring required under this consent must be undertaken in accordance with section 9.40 of the EP&A Act
Night	The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8 am on Sundays and Public Holidays
Non-compliance	An occurrence, set of circumstances or Development that is a breach of this consent
OEH	NSW Office of Environment and Heritage
OEMP	Operational Environmental Management Plan
Operation	The receipt or processing of waste upon completion of construction.
PCA	Principal Certifying Authority in accordance with the EP&A Act
Planning Secretary	The Secretary of the Department of Planning and Environment, or nominee
PMF	Probable Maximum Flood
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
POEO (Waste) Regulation	<i>Protection of the Environment Operations (Waste) Regulation 2014</i>
Reasonable	Means applying judgement in arriving at a decision, taking into account mitigation benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements.
Registered Aboriginal Parties	Means the Aboriginal persons identified in accordance with the document entitled " <i>Aboriginal cultural heritage consultation requirements for proponents 2010</i> " (DECCW)
Rehabilitation	The restoration of land disturbed by the Development to a good condition, to ensure it is safe, stable and non-polluting
Response to submissions	The Applicant's response to issues raised in submissions received in relation to the application for consent for the Development under the EP&A Act titled <i>Response to Submissions Report SSD 15_7396 Thermal Waste Processing Project</i> , prepared by AECOM, dated 31 July 2017
Sensitive receivers	A location where people are likely to work, occupy or reside, including a dwelling, school, hospital, office or public recreational area
Site	The land defined in Schedule 1
Stack 8	Bypass Stack as described in the EIS
Thermal treatment	Incineration
VENM	Virgin Excavated Natural Material
Waste	Has the same meaning as the definition of the term in the Dictionary to the POEO Act

SCHEDULE 2

PART A: ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

- A1. In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the Development.

TERMS OF CONSENT

- A2. The Development may only be carried out:
- (a) in compliance with the conditions of this consent;
 - (b) in accordance with all written directions of the Planning Secretary;
 - (c) in accordance with the EIS and Response to Submissions;
 - (d) in accordance with the Development Layout Plans in Appendix 1; and
 - (e) in accordance with the management and mitigation measures in Appendix 2.
- A3. Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:
- (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary; and
 - (b) the implementation of any actions or measures contained in any such document referred to in Condition A3(a).
- A4. The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in Condition A2(c). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in Condition A2(c) and A2(d), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

Note: For the purposes of this condition, there will be an inconsistency between documents if it is not possible to comply with both documents, or in the case of a condition of consent or direction of the Planning Secretary, and a document, if it is not possible to comply with both the condition or direction, and the document.

LIMITS OF CONSENT

Lapsing

- A5. This consent lapses five years after the date from which it operates, unless the Development has physically commenced on the land to which the consent applies before that date.

Waste

- A6. The Applicant must not cause, permit or allow any materials or waste generated outside the site to be received at the site for storage, use, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by an EPL.

Time Limit on Consent

- A7. The operation of the development may be carried out on the site for a period of 25 years from the date of this consent.

Waste Limits

- A8. The Applicant must not receive or process on Site more than 8,000 tonnes of waste per year comprising:
- (a) clinical and related waste;
 - (a) waste pharmaceuticals, drugs and medicines;
 - (b) waste from the production and preparation of pharmaceutical products;
 - (c) quarantine wastes; and
 - (d) other wastes as permitted by an EPL.
- A9. The Applicant must not process more than 800 kilograms of waste per hour.
- A10. The Applicant must not process more than 10% by mass of other waste at any one time including:
- (a) pitch sludge residue;
 - (b) solvents & paints; and
 - (c) oily rags

except as permitted by an EPL.

NOTIFICATION OF COMMENCEMENT

- A11. The date of commencement of each of the following phases of the Development must be notified to the Department in writing, at least one month before that date:
- (a) construction;
 - (b) operation;
 - (c) cessation of operations; and
 - (d) decommissioning.
- A12. If the construction or operation or decommissioning of the Development is to be staged, the Department must be notified in writing at least one month before the commencement of each stage, of the date of commencement and the Development to be carried out in that stage.

REQUEST FOR INFORMATION

- A13. The Applicant must retain all weighbridge records as required by the POEO (Waste) Regulation and for the life of the Development. The weighbridge records must be made immediately available on request by the Planning Secretary and/or the EPA.
- A14. The Applicant must retain waste classification records for all wastes received on the site and waste disposed from the site for the life of the Development. The waste classification records must be made immediately available on request by the EPA and/or the Planning Secretary.

EVIDENCE OF CONSULTATION

- A15. Where conditions of this consent require consultation with an identified party, the Applicant must:
- (a) consult with the relevant party prior to submitting the subject document to the Planning Secretary for approval; and
 - (b) provide details of the consultation undertaken including:
 - (i) the outcome of that consultation, matters resolved and unresolved; and
 - (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.

STAGING, COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS

- A16. With the approval of the Planning Secretary, the Applicant may:
- (a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the Development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);
 - (b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and
 - (c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the Development).
- A17. If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.
- A18. If approved by the Planning Secretary, updated strategies, plans or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan or program.

PROTECTION OF PUBLIC INFRASTRUCTURE

- A19. Before the commencement of construction, the Applicant must consult with the relevant owner and provider of services that are likely to be affected by the Development to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure;
- A20. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by carrying out the Development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the Development.

DEMOLITION

- A21. All demolition must be carried out in accordance with *Australian Standard AS 2601-2001 The Demolition of Structures* (Standards Australia, 2001).

STRUCTURAL ADEQUACY AND CERTIFICATION

- A22. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the Development, must be constructed in accordance with the relevant requirements of the BCA.

Note:

- Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the Development.
- Under section 21 of the Coal Mine Subsidence Compensation Act 2017, the Applicant is required to obtain the Chief Executive of Subsidence Advisory NSW's approval before carrying out certain Development in a Mine Subsidence District.

COMPLIANCE

- A23. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the Development.

OPERATION OF PLANT AND EQUIPMENT

- A24. All plant and equipment used on site, or to monitor the performance of the Development must be:
- (a) maintained in a proper and efficient condition; and
 - (a) operated in a proper and efficient manner

EXTERNAL WALLS AND CLADDING FLAMMABILITY

- A25. The external walls of all buildings including additions to existing buildings must comply with the relevant requirements of the BCA.
- A26. Before the issue of a Construction Certificate and an Occupation Certificate, the Applicant must provide the Certifying Authority with documented evidence that the products and systems proposed for use or used in the construction of external walls including finishes and claddings such as synthetic or aluminium composite panels comply with the requirements of the BCA.
- A27. The Applicant must provide a copy of the documentation given to the Certifying Authority under Condition A26 to the Planning Secretary within seven days after the Certifying Authority accepts it.

UTILITIES AND SERVICES

- A28. Before the construction of any utility works associated with the Development, the Applicant must obtain relevant approvals from service providers.
- A29. Before the commencement of operation of the Development, the Applicant must obtain a Compliance Certificate for water and sewerage infrastructure servicing of the site under section 49 of the *Hunter Water Act 1991*.

WORKS AS EXECUTED PLANS

- A30. Before the issue of the final Occupation Certificate, works-as-executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved, must be submitted to the PCA.

APPLICABILITY OF GUIDELINES

- A31. References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent. However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.

ADVISORY NOTES

- AN1. All licences, permits, approvals and consents as required by law must be obtained and maintained as required for the Development. No condition of this consent removes any obligation to obtain, renew or comply with such licences, permits, approvals and consents.

PART B: ENVIRONMENTAL PERFORMANCE AND MANAGEMENT

HUMAN HEALTH

- B1. The Applicant must ensure the Development is carried out in accordance with the *Work Health and Safety Regulation 2017* (WHS Regulation) and the requirements of SafeWork NSW.

Human Health Validation and Verification Plan

- B2. Prior to the commencement of operation, the Applicant must prepare a Human Health Validation and Verification Plan (HHVVP) to the satisfaction of the Planning Secretary. The HHVVP must form part of the OEMP required by Condition C5. The HHVVP must:
- (a) be prepared by a suitably qualified and experienced person(s);
 - (b) be prepared in consultation with the OEH, the EPA and HNEPH;
 - (c) include a program to demonstrate compliance with the emission concentrations used for chronic exposure assessment in the HHRA;
 - (d) include regular and ongoing evaluation of emissions to ensure any potential trend towards non-compliance, that is, above the average source emission data used for the assessment, is identified within the relevant averaging period;
 - (e) include emissions monitoring, including odour, at regular frequencies under worst-case operating conditions and using different waste streams;
 - (f) include adequate resourcing to monitor and action any exceedances of emission limits;
 - (g) include the following to be undertaken as part of the ongoing facility monitoring program:
 - (i) investigation and implementation of best practice industry standards to ensure efficient operation of the:
 - waste handling process controls implemented for managing odorous and hazardous emissions from "non-stack" or fugitive sources;
 - upgraded Bag house 5 scrubber system; and
 - bottom ash or "residue" disposal system;
 - (ii) a definition of 'efficiency' measures for each of these systems/processes; and
 - (iii) a demonstration of the 'efficiency' of these systems/processes at the facility based on (ii) above
- B3. The Applicant must:
- (a) not commence operation until the HHVVP Plan required by Condition B2 is approved by the Planning Secretary; and
 - (b) implement the most recent version of the HHVVP approved by the Planning Secretary for the five years following commencement of operations.

Bypass Stack Management Plan

- B4. Prior to the commencement of operation, the Applicant must prepare a Bypass Stack Management Plan (BSMP) to the satisfaction of the Planning Secretary. The BSMP must form part of the OEMP required by Condition C5 and be prepared in accordance with Condition C1. The BSMP must:
- (a) identify critical facility operational scenarios that will require the use of Stack 8;
 - (b) detail procedures on optimal facility conditions and how operational procedures designed to limit the use of Stack 8 will be integrated into the operational protocols;
 - (c) define 'emergency' scenarios and identify options (to using Stack 8), should identified 'emergency' situations occur;
 - (d) document and ensure the implementation of procedures to guide the safe and restricted use of Stack 8 (e.g. limiting use under optimal conditions of dispersion, if at all required); and
 - (e) identify other options available to address the risk scenario that the use of Stack 8 presents.
- B5. The Applicant must:
- (a) not commence the operation until the BSMP required by Condition B4 is approved by the Planning Secretary;
 - (b) implement the most recent version of the BSMP approved by the Planning Secretary for the duration of the Development.

AIR QUALITY

Dust Minimisation

- B6. The Applicant must implement all reasonable and feasible measures to minimise dust generated during demolition, earthworks, construction and operation of the Development.
- B7. During construction, the Applicant must ensure that:
- (a) exposed surfaces and stockpiles are suppressed by regular watering;
 - (b) all trucks entering or leaving the site with loads have their loads covered;
 - (c) trucks associated with the Development do not track dirt onto the public road network;
 - (d) public roads used by these trucks are kept clean; and
 - (e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.

Thermal Plant Design

- B8. Prior to the commencement of construction, the Applicant must prepare a Pre-construction Design Report (PDR) to the satisfaction of the Planning Secretary. The report must be submitted to Planning Secretary two months prior to the commencement of construction of the thermal plant. The PDR must:
- (a) be prepared by a suitably qualified and experienced person(s);
 - (b) include the final thermal treatment plant design;
 - (c) provide a detailed discussion and illustration of all process units and plant associated with generation and discharge of emissions from the thermal treatment plant;
 - (d) include the design air/gas flow balance for the thermal treatment process expressed at both normalised and actual conditions;
 - (e) include the manufacturer's emission guarantees;
 - (f) provide calculations of design discharge concentrations and emissions rates from the thermal treatment plant; and
 - (g) include a post commissioning Proof of Performance Air Emissions Sampling Plan including:
 - (i) manual reference methods testing;
 - (ii) methodology to demonstrate the performance of the facility for treating various waste types, compositions, ratios and contaminant loadings; and
 - (iii) continuous emission monitoring, commissioning, quality assurance and calibration plans to the satisfaction of the EPA.
- B9. The Applicant must not commence construction until the PDR required by Condition B8 has been approved by the Planning Secretary.

Air Quality Discharges

- B10. The Applicant must install and operate equipment in line with best practice to ensure the Development complies with all load limits, air quality criteria/air emission limits and air quality monitoring requirements as specified in the EPL for the site.

Air Quality Management Plan

- B11. Prior to the commencement of operation, the Applicant must prepare an Air Quality Management Plan (AQMP) to the satisfaction of the Planning Secretary. The AQMP must form part of the OEMP required by Condition C5 and be prepared in accordance with Condition C1. The AQMP must:
- (a) be prepared by a suitably qualified and experienced person(s);
 - (b) detail and rank all emissions from all sources of the Development, including particulate emissions;
 - (c) describe a program that is capable of evaluating the performance of the operation and determining compliance with key performance indicators including consideration of input variability overtime;
 - (d) identify the control measures that will be implemented for each emission source, including fugitive emissions; and
 - (e) nominate the following for each of the proposed controls:
 - (i) key performance indicator;
 - (ii) monitoring method including inputs;
 - (iii) location, frequency (at least quarterly) and duration of monitoring;
 - (iv) record keeping including a live register of issues encountered during operations;
 - (v) complaints register;
 - (vi) response procedures; and

- (vii) compliance monitoring.

B12. The Applicant must:

- (a) not commence operation until the AQMP required by Condition B11 is approved by the Planning Secretary; and
- (b) implement the most recent version of the AQMP approved by the Planning Secretary for the duration of the Development.

Odour Management

B13. The Applicant must ensure the Development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).

Post Commissioning Air Emissions Verification Report

B14. Within three months of commissioning the thermal treatment plant, the Applicant must prepare, to the satisfaction of the Planning Secretary, and submit to HNEPH and EPA, a Post Verification Trial Air Emissions Verification Report. The Post Verification Trial Air Emissions Verification Report must include:

- (a) air emission sampling results for the thermal treatment plant obtained in accordance with the post commissioning Proof of Performance Air Emissions Sampling Plan required by Condition B9;
- (b) a comparison of the emission sampling results against the discharge limits for the thermal treatment plant specified in the EPL for the site;
- (c) detailed verification of the predicted off-site impacts; and
- (d) the approach, including timeframe for implementation, to resolve any non-compliances with the EPL and the *Protection of the Environment Operations (Clean Air) Regulation 2010*.

HAZARDS AND RISK

B15. The Applicant must implement all control measures contained within the Preliminary Hazard Analysis prepared by AECOM dated 31 July 2017.

Pre-construction Studies

B16. At least one month prior to the commencement of construction of the Development (except for construction of preliminary works that are outside the scope of the hazard studies), the Applicant must prepare and submit for the approval of the Planning Secretary the following studies:

- (a) A **Fire Safety Study** for the Development, which covers the relevant aspects of the Department's Hazardous Industry Planning Advisory Paper No. 2, *'Fire Safety Study Guidelines'* and the New South Wales Government's *'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems'*. The site's existing Fire Safety Study must be updated to include changes due to SSD 7396. The updated study must also be submitted to Fire and Rescue NSW for approval.
- (b) A **Hazard and Operability Study** for the Development, chaired by a qualified person, independent of the Development, approved by the Planning Secretary prior to the commencement of the study. The study must be carried out in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 8, 'HAZOP Guidelines'*. The study must include (but not be limited to):
 - (i) the thermal processing monitoring and control system;
 - (ii) the activated carbon dosing system and Baghouse No. 5 scrubber system;
 - (iii) the thermal treatment of cytotoxic waste including combustion efficiencies; and
 - (iv) a program for the implementation of all recommendations made during the study; and if the Applicant intends to defer the implementation of a recommendation, reasons must be documented.
- (c) A **Final Hazard Analysis** of the Development, prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'*. The Applicant must ensure and demonstrate the facility is designed to meet current international best available techniques and best environmental practices, particularly with respect to:
 - (v) Process design and control;
 - (vi) Emission control equipment design and control;
 - (vii) Emission monitoring with real-time feedback to the controls of the process;
 - (viii) Arrangements for the receipt of waste; and
 - (ix) Management of residues from the thermal treatment process.
- (d) A **Construction Safety Study**, prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 7 'Construction Safety'*. The Construction Safety Study must include detail procedures for managing flood risks during construction, demolition and operation, including flood recovery measures, procedures for ensuring the protection of infrastructure and human safety.

Pre-commissioning

- B17. The Applicant must develop and implement the plans and systems set out under a), to c) below no later than two months prior to the commencement of commissioning of the Development and each modification to the Development or within such further period as the Planning Secretary may agree. The Applicant must submit for the approval of the Planning Secretary documentation describing those plans and systems. Commissioning must not commence until approval has been given by the Planning Secretary.
- (a) Arrangements covering the transport of hazardous materials including details of routes to be used for the movement of vehicles carrying hazardous materials to the Development. The routes must be selected in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 11, 'Route Selection'* (as may be updated or replaced from time to time). Suitable routes identified in the study must be used except where departures are necessary for local deliveries or emergencies.
 - (b) The Emergency Plan and detailed emergency procedures for the site must be updated to include SSD 7396. The plan must include detailed procedures for the safety of all people outside of the Development who may be at risk from the Development. The plan must be in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'*.
 - (c) The Safety Management System for the site must be updated to include SSD 7396. The document must clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records must be kept on-site and must be available for inspection by Planning Secretary upon request. The Safety Management System must be developed in accordance with the *Department's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'*.

Ongoing

- B18. Within twelve months after the commencement of operation and every three years thereafter, or at such intervals as the Planning Secretary may agree, the Applicant must carry out a comprehensive Hazard Audit of the Development. Division 9.4 of Part 9 of the EP&A Act applies to these audits, which are for the purpose of verifying the integrity of safety systems and to ensure that the Development is being operated in accordance with its hazards related conditions of consent. The audits must:
- (a) be carried out at the Applicant's expense by a qualified person or team, who have been approved by the Planning Secretary and are independent of the Development;
 - (b) be carried out in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'*; and
 - (c) include a review of the site Safety Management System and a review of all entries made in the incident register since the previous audit.
- B19. Within one month of each audit carried out in accordance with Condition B18, the Applicant must submit a report to the satisfaction of the Planning Secretary for approval. The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented. The Applicant must implement the recommendations to the satisfaction of the Planning Secretary.

Further Requirements

- B20. The Applicant must ensure that natural gas is the only fuel consumed by the rotary kiln, for both the primary and secondary combustion chambers.
- B21. The Applicant must comply with all reasonable requirements of the Planning Secretary in respect of the implementation of any measures arising from the reports submitted in respect of Conditions B16 to B18 inclusive, within such time as the Planning Secretary may agree.
- B22. The Applicant must store all chemicals, fuels and oils used on-site in accordance with:
- (a) the requirements of all relevant Australian Standards; and
 - (b) the NSW EPA's *'Storing and Handling of Liquids: Environmental Protection – Participants Handbook'* if the chemicals are liquids.

In the event of an inconsistency between the requirements listed from (a) to (b) above, the most stringent requirement must prevail to the extent of the inconsistency.

Dangerous Goods

- B23. Dangerous goods, as defined by the Australian Dangerous Goods Code, must be stored and handled strictly in accordance with:
- (a) The latest version of the relevant Australian Standards, particularly AS 1940-2004 *The storage and handling of flammable and combustible liquids* (Standards Australia, 2004) and AS/NZS 1596:2014 *The storage and handling of LP Gas* (Standards Australia, 2014), and the *Australian Dangerous Goods Code*;

- (b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
- (c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management – technical bulletin (EPA, 1997) (as may be updated or replaced from time to time).

In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement must prevail to the extent of the inconsistency.

WASTE MANAGEMENT

Incoming Waste

- B24. All waste loads entering the site must proceed via the weighbridge for inspection and recording of quantity, classification and source of waste.
- B25. All residual waste must also leave the site via the weighbridge and its quantity, type, quality and destination recorded.
- B26. The Applicant must record the amount of waste (in tonnes) received at the site on a daily basis and retain all sampling and waste classification data for the life of the Development in accordance with the requirements of the EPA.
- B27. All waste processing, including storage and materials handling activities must be undertaken in the enclosed processing building and within the designated areas.
- B28. All waste must be unloaded within the designated loading docks.
- B29. The Applicant must ensure all incoming waste loads are screened to ensure waste is not accepted for storage or processing at the site, except as expressly permitted by the EPL.
- B30. The Applicant must ensure that all waste controlled under a tracking system has the correct documentation prior to acceptance at the site. Any loads not in possession of the correct documentation must be rejected.

Transportation of Waste

- B31. The Applicant must ensure the transportation of waste is:
 - (a) undertaken by a transporter authorised to transport such wastes; and
 - (b) to a place that can lawfully accept that waste.

Pests, Vermin and Noxious Weed Management

- B32. The Applicant must:
 - (a) implement suitable measures to manage pests, vermin and declared noxious weeds on the site; and
 - (b) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard or cause the loss of amenity in the surrounding area.

Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weed Act 1993.

Waste Storage and Processing

- B33. All unprocessed waste must be secured and maintained within designated internal waste storage areas at all times and must not leave the site onto neighbouring public or private properties.
- B34. Washing of waste bins and the tippler bin must only occur in the dedicated bin wash area.

Waste Management Plan

- B35. Prior to the commencement of operation, the Applicant must prepare a Waste Management Plan (WMP) for the Development to the satisfaction of the Planning Secretary. The WMP must form part of the OEMP required by Condition C5 and be prepared in accordance with Condition C1. The Plan must:
 - (a) detail the type and quantity of waste to be generated during operation of the Development;
 - (b) detail how the Applicant will compile and calculate percentages of incoming waste streams;
 - (c) describe the handling, storage and disposal of all waste streams generated on site, consistent with the *Protection of the Environment Operations Act 1997*, *Protection of the Environment Operations (Waste) Regulation 2014* and the *Waste Classification Guideline* (Department of Environment, Climate Change and Water, 2009);
 - (d) detail the procedure to track and screen waste;
 - (e) include a detailed plan showing the storage locations of all waste types including a designated area for quarantined waste;

- (f) include a protocol for the unloading of waste at the designated loading docks to avoid spillage; and
- (g) include the Management and Mitigation Measures included in Appendix 2.

B36. The Applicant must:

- (a) not commence operation until the WMP required by Condition B35 is approved by the Planning Secretary; and
- (b) implement the most recent version of the WMP approved by the Planning Secretary for the duration of the Development.

Statutory Requirements

- B37. All waste materials removed from the site must only be directed to a waste management facility or premises lawfully permitted to accept the materials.
- B38. The Applicant must assess and classify all liquid and non-liquid wastes to be taken off site in accordance with the EPA's *Waste Classification Guidelines Part 1: Classifying Waste*, November 2014, or its latest version and dispose of all wastes to a facility that may lawfully accept the waste.

SOILS, WATER QUALITY AND HYDROLOGY

Imported Soil

B39. The Applicant must:

- (a) ensure that only VENM, or ENM, or other material approved in writing by the EPA is used as fill on the site;
- (b) keep accurate records of the volume and type of fill to be used; and
- (c) make these records available to the Department upon request.

Erosion and Sediment Control

- B40. Prior to the commencement of construction, the Applicant must install and maintain suitable erosion and sediment control measures on-site, in accordance with the relevant requirements in the latest version of the *Managing Urban Stormwater: Soils and Construction Guideline* and the Erosion and Sediment Control Plan included in the CEMP required by Condition C2.

Discharge Limits

- B41. The Development must comply with section 120 of the POEO Act, which prohibits the pollution of waters, except as expressly provided for in an EPL.

Stormwater Management System

- B42. The Applicant must connect the site to the existing site stormwater management system. The system must:
- (a) ensure that the system capacity is maintained in accordance with *Managing Urban Stormwater - Soils and Construction Vol. 1* (Landcom, 2004);
 - (b) divert existing clean surface water around operational areas of the site; and
 - (c) prevent cross-contamination of clean and waste water.

- B43. Prior to the discharge of any waste to sewer, the Applicant must enter into a Trade Waste Agreement with Hunter Water.

Flood Management

- B44. The Applicant must design, construct and operate the Development in accordance with the recommendations contained within the *Advisian Site Flood Risk Assessment* dated 7 February 2017. The final design plans must:
- (a) be prepared by a suitably qualified and experienced person(s);
 - (b) ensure the finished floor level of the waste handling, storage and processing area is no lower than the 0.5% Annual Exceedance Probability flood plus 0.5 m freeboard (at least 13 m AHD);
 - (c) incorporate 1 metre high dry flood proofing up to 14 m AHD to the waste handling, storage and processing area;
 - (d) ensure buildings and structures can withstand the predicted velocities and depths of a 0.05% AEP event;
 - (e) ensure suitable containment is provided to minimise mobilisation of waste in floods between the 0.05% AEP event and the Probable Maximum Flood (PMF); and
 - (f) ensure the ash handling area is protected by a wall with a minimum height of 13 m AHD.
- B45. Prior to the commencement of construction, the Applicant must engage a suitably qualified and experienced person(s) to provide specifications for the engineered fill required to construct the building platform and to ensure design of fill batters and scour protection consider flood forces from a PMF.

- B46. The Applicant must ensure that:
- (a) all machinery and equipment which has the potential to become buoyant should floodwaters enter the building are bolted to the ground; and
 - (b) all storage bins can be secured safely to reduce the risk of movement and overtopping.
- B47. Prior to the commencement of operation, the Applicant must prepare a Flood Emergency Response Plan (FERP) to the satisfaction of the Planning Secretary. The FERP must form part of the OEMP required by Condition C5 and be prepared in accordance with Condition C1. The FERP must:
- (a) be prepared by a suitably qualified and experienced person(s) in consultation with the OEH;
 - (b) address the provisions of the *Floodplain Risk Management Guideline* (OEH 2007);
 - (c) include details of:
 - (i) the flood emergency responses for operation phases of the Development including procedures for the deployment and periodic testing of the flood barriers;
 - (ii) predicted flood levels;
 - (iii) flood warning time and flood notification;
 - (iv) assembly points and evacuation routes;
 - (v) evacuation and refuge protocols; and
 - (vi) awareness training for employees and contractors including training of all staff in the use of the flood barriers.
- B48. The Applicant must:
- (a) not commence operation until the FERP required by Condition B47 is approved by the Planning Secretary; and
 - (b) implement the most recent version of the FERP approved by the Planning Secretary for the duration of the Development.

Water Management Plan

- B49. Prior to the commencement of operation, the Applicant must update the site's Water Management Plan (WMP) to incorporate the operational aspects of SSD 7396 to the satisfaction of the Planning Secretary. The updated WMP must form part of the OEMP required by Condition C5 and be prepared in accordance with Condition C1. The WMP must:
- (a) detail water use, treatment, disposal and management on-site;
 - (b) detail the management of wastewater streams on-site;
 - (c) contain a Surface Water Management Plan, including:
 - (i) a program to monitor:
 - surface water flows and quality;
 - surface water storage and use; and
 - sediment basin operation;
 - (ii) surface water impact assessment criteria, including trigger levels for investigating and potential adverse surface water impacts; and
 - (iii) a protocol for the investigation and mitigation of identified exceedances of the surface water impact assessment criteria.
- B50. The Applicant must:
- (a) not commence operation until the updated WMP required by Condition B49 is approved by the Planning Secretary; and
 - (b) implement the most recent version of the WMP approved by the Planning Secretary for the duration of the Development.

NOISE

Hours of Work

- B51. The Applicant must comply with the hours detailed in **Table 1**, unless otherwise agreed in writing by the Planning Secretary.

Table 1: Hours of Work

Activity	Day	Time
Earthworks and construction	Monday – Friday Saturday	7 am to 6 pm 8 am to 1 pm
Operation		
Thermal treatment	Monday – Sunday	24 hours
Truck movement	Monday – Sunday	7 am to 10 pm

- B52. Works outside of the hours identified in Condition B51 may be undertaken in the following circumstances:
- for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or
 - where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.

Construction Noise Limits

- B53. The Development must be constructed with the aim of achieving the construction noise management levels detailed in the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures in the EIS and described in the Construction Noise Management Plan required by Condition C2.

Operational Noise Limits

- B54. The Applicant must ensure the Development will be operated within the noise limits for the site under Development consent DA-86-04-01 and LEC 10397 of 1995.

Operation

- B55. The Applicant must ensure all external doors of the waste handling and processing building are kept shut at night.
- B56. A noise verification report must be submitted to the EPA and the Department within 12 months of the completion of commissioning. The report must be prepared by a suitably qualified and experienced acoustic consultant and include:
- an analysis of compliance with noise limits specified in Condition B54;
 - an outline of management actions to be taken to address any exceedances of the limits specified in Condition B54; and
 - a description of contingency measures in the event management actions are not effective in reducing noise levels to an acceptable level.

Road Traffic Noise

- B57. Prior to the commencement of construction, the Applicant must prepare a Driver Code of Conduct and induction training for the Development to minimise road traffic noise. The Applicant must update the Driver Code of Conduct and induction training for construction and operation and must implement the Code of Conduct for the life of the Development

TRAFFIC AND ACCESS

Parking

- B58. The Applicant must provide sufficient parking facilities on-site, including for heavy vehicles and for site personnel, to ensure that traffic associated with the Development does not utilise public and residential streets or public parking facilities.

Operating Conditions

- B59. The Applicant must ensure:
- internal roads, driveways and parking (including grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) associated with the Development are constructed and maintained in accordance with the latest version of AS 2890.1 and AS 2890.2;
 - the swept path of the longest vehicle entering and exiting the site, as well as manoeuvrability through the site, is in accordance with the relevant AUSTROADS guidelines;
 - the Development does not result in any vehicles queuing on the public road network;

- (d) heavy vehicles and bins associated with the Development are not parked on local roads or footpaths in the vicinity of the site;
- (e) all vehicles are wholly contained on site before being required to stop;
- (f) all loading and unloading of materials is carried out on-site;
- (g) all trucks entering or leaving the site with loads have their loads covered and do not track dirt onto the public road network;
- (h) heavy vehicles associated with the Development use the transport route shown in Appendix 4 unless otherwise agreed to by the Planning Secretary; and
- (i) the proposed turning areas in the car park are kept clear of any obstacles, including parked cars, at all times.

BIOSECURITY

Biosecurity

- B60. The Applicant must handle, store and dispose of biosecurity waste in accordance with the *Commonwealth Biosecurity Act 2015*.

CONTAMINATION

- B61. Prior to the commencement of earthworks, the Applicant must prepare an unexpected contamination procedure to ensure that potentially contaminated material is appropriately managed. The procedure must form part of the of the CEMP in accordance with Condition C2 and must ensure any material identified as contaminated is disposed off-site, with the disposal location and results of testing submitted to the Planning Secretary, prior to its removal from the site.

SECURITY

- B62. Prior to the commencement of operation, the Applicant must prepare a Security Protocol for the management of pharmaceutical waste to the satisfaction of the Planning Secretary. The Protocol must form part of the OEMP required by Condition C5 and describe the measures to be undertaken to ensure the secure transport, storage and processing of pharmaceutical waste.
- B63. The Applicant must ensure the fence surrounding the site is maintained to a standard which prevents unauthorised access.

ABORIGINAL HERITAGE

Unexpected Finds Protocol

- B64. If any item or object of Aboriginal heritage significance is identified on site:
- (a) all work in the immediate vicinity of the suspected Aboriginal item or object must cease immediately;
 - (b) a 10 m wide buffer area around the suspected item or object must be cordoned off; and
 - (c) the OEH must be contacted immediately.
- Work in the immediate vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the *National Parks and Wildlife Act 1974*.

BIODIVERSITY

- B65. The Applicant must prepare a Clearing Protocol to be implemented when clearing the site's vegetation to the satisfaction of the Planning Secretary. The Protocol must form part of the CEMP in accordance with Condition C2 and in accordance with the requirements of the Biodiversity Assessment Report by EMM dated 25 January 2017.
- B66. During construction the Applicant must ensure appropriate sediment controls are in place to prevent sedimentation of Swamp Creek.

PART C: ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

MANAGEMENT PLAN REQUIREMENTS

- C1. The Applicant must ensure that the environmental management plans required under Condition C5 of this consent are prepared by a suitably qualified person or persons in accordance with best practice and include:
- (a) detailed baseline data;
 - (b) a description of:
 - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - (ii) any relevant limits or performance measures/criteria; and
 - (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Development or any management measures;
 - (c) a description of the management measures that would be implemented to comply with the relevant statutory requirements, limits or performance measures/criteria;
 - (d) a program to monitor and report on the:
 - (i) impacts and environmental performance of the Development; and
 - (ii) effectiveness of any management measures (see (c) above);
 - (e) a contingency plan to manage any unpredicted impacts and their consequences;
 - (f) a program to investigate and implement ways to improve the environmental performance of the Development over time;
 - (g) a protocol for managing and reporting any:
 - (i) incidents;
 - (ii) complaints;
 - (iii) non-compliances with statutory requirements; and
 - (iv) exceedances of the impact assessment criteria and/or performance criteria; and
 - (h) a protocol for periodic review of the plan.

Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- C2. The Applicant must prepare a Construction Environmental Management Plan (CEMP) in accordance with the requirements of condition C1 and to the satisfaction of the Planning Secretary.
- C3. As part of the CEMP required under Condition C2 of this consent, the Applicant must include the following:
- (a) Construction Traffic Management;
 - (b) Erosion and Sediment Control Plan (see Condition B40);
 - (c) Construction Noise Management Plan (see Condition B53);
 - (d) Contamination Management Plan including an unexpected finds protocol (see Condition B61);
 - (e) Clearing Protocol (see Condition B65); and
 - (f) Community Consultation and Complaints Handling.
- C4. The Applicant must:
- (a) not commence construction of the Development until the CEMP is approved by the Planning Secretary; and
 - (b) carry out the construction of the Development in accordance with the CEMP approved by the Planning Secretary and as revised and approved by the Planning Secretary from time to time.

OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN

- C5. The Applicant must prepare an Operational Environmental Management Plan (OEMP) in accordance with the requirements of condition C1 and to the satisfaction of the Planning Secretary.
- C6. As part of the OEMP required under Condition C5 of this consent, the Applicant must include the following:
- (a) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Development;
 - (b) describe the procedures that would be implemented to:
 - (i) keep the local community and relevant agencies informed about the operation and environmental performance of the Development;
 - (ii) receive, handle, respond to, and record complaints;

- (iii) resolve any disputes that may arise;
- (iv) respond to any non-compliance;
- (v) respond to emergencies; and
- (c) include the following environmental management plans:
 - (i) Human Health Validation and Verification Plan (see Condition B2)
 - (ii) Bypass Stack Management Plan (see Condition B4)
 - (iii) Air Quality Management Plan (see Condition B11);
 - (iv) Waste Management Plan (see Condition B35);
 - (v) Flood Emergency Response Plan (see Condition B47);
 - (vi) Water Management Plan (see Condition B49); and
 - (vii) Security Protocol (see Condition B62).

C7. The Applicant must:

- (a) not commence operation until the OEMP is approved by the Planning Secretary; and
- (b) operate the Development in accordance with the OEMP approved by the Planning Secretary (and as revised and approved by the Planning Secretary from time to time).

REVISION OF STRATEGIES, PLANS AND PROGRAMS

C8. Within three months of:

- (a) the submission of an incident report under condition C11;
- (b) the submission of an Independent Environmental Audit under condition C17;
- (c) the approval of any modification of the conditions of this consent; or
- (d) the issue of a direction of the Planning Secretary under condition A3 which requires a review,

C9. The strategies, plans and programs required under this consent must be reviewed, and the Department must be notified in writing that a review is being carried out.

C10. If necessary to either improve the environmental performance of the Development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.

Note: *This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the Development.*

REPORTING AND AUDITING

Incident Notification, Reporting and Response

C11. The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the Development (including the Development application number and the name of the Development if it has one), and set out the location and nature of the incident. Subsequent notification requirements must be given and reports submitted in accordance with the requirements set out in Appendix 5.

Non-Compliance Notification

C12. The Department must be notified in writing to compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of any non-compliance.

C13. A non-compliance notification must identify the Development and the application number for it, set out the condition of consent that the Development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

C14. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Compliance Reporting

C15. No later than 6 weeks before the date notified for the commencement of construction, a Compliance Monitoring and Reporting Program prepared in accordance with the Compliance Reporting Post Approval Requirements (Department 2018) must be submitted to the Department.

C16. Compliance Reports of the project must be carried out in accordance with the Compliance Reporting Post Approval Requirements (Department 2018).

C17. The Applicant must make each Compliance Report publicly available no later than 60 days after submitting it to the Department and notify the Department in writing at least 7 days before this is done.

Independent Audit

- C18. No later than 4 weeks before the date notified for the commencement of construction, an Independent Audit Program prepared in accordance with the Independent Audit Post Approval Requirements (Department 2018) must be submitted to the Department.
- C19. Independent Audits of the Development must be carried out in accordance with:
- (a) the Independent Audit Program submitted to the Department under condition C18 of this consent; and
 - (b) the requirements for an Independent Audit Methodology and Independent Audit Report in the Independent Audit Post Approval Requirements (Department 2018).
- C20. In accordance with the specific requirements in the Independent Audit Post Approval Requirements (Department 2018), the Applicant must:
- (a) review and respond to each Independent Audit Report prepared under condition C19 of this consent;
 - (b) submit the response to the Department; and
 - (c) make each Independent Audit Report and response to it publicly available no later than 60 days after submission to the Department and notify the Department in writing at least 7 days before this is done.

Monitoring and Environmental Audits

- C21. Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification and independent environmental auditing.

Note: For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the Development to provide data on compliance with the consent or on the environmental impact of the Development, and an "environmental audit" is a periodic or particular documented evaluation of the Development to provide information on compliance with the consent or the environmental management or impact of the Development.

ACCESS TO INFORMATION

- C22. At least 48 hours before the commencement of construction until the completion of all works under this consent, the Applicant must:
- (a) make the following information and documents (as they are obtained or approved) publicly available on its website:
 - (b) the documents referred to in condition A2 of this consent and the final layout plans for the Development;
 - (c) all current statutory approvals for the Development;
 - (d) all approved strategies, plans and programs required under the conditions of this consent;
 - (e) regular reporting on the environmental performance of the Development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;
 - (f) a comprehensive summary of the monitoring results of the Development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - (g) a summary of the current stage and progress of the Development;
 - (h) contact details to enquire about the Development or to make a complaint;
 - (i) a complaints register, updated monthly;
 - (j) the Compliance Reporting of the Development;
 - (k) audit reports prepared as part of any independent audit of the Development and the Applicant's response to the recommendations in any audit report;
 - (l) any other matter required by the Planning Secretary; and
 - (m) keep such information up to date, to the satisfaction of the Planning Secretary.
- unless otherwise agreed by the Planning Secretary.

APPENDIX 1 DEVELOPMENT LAYOUT PLANS

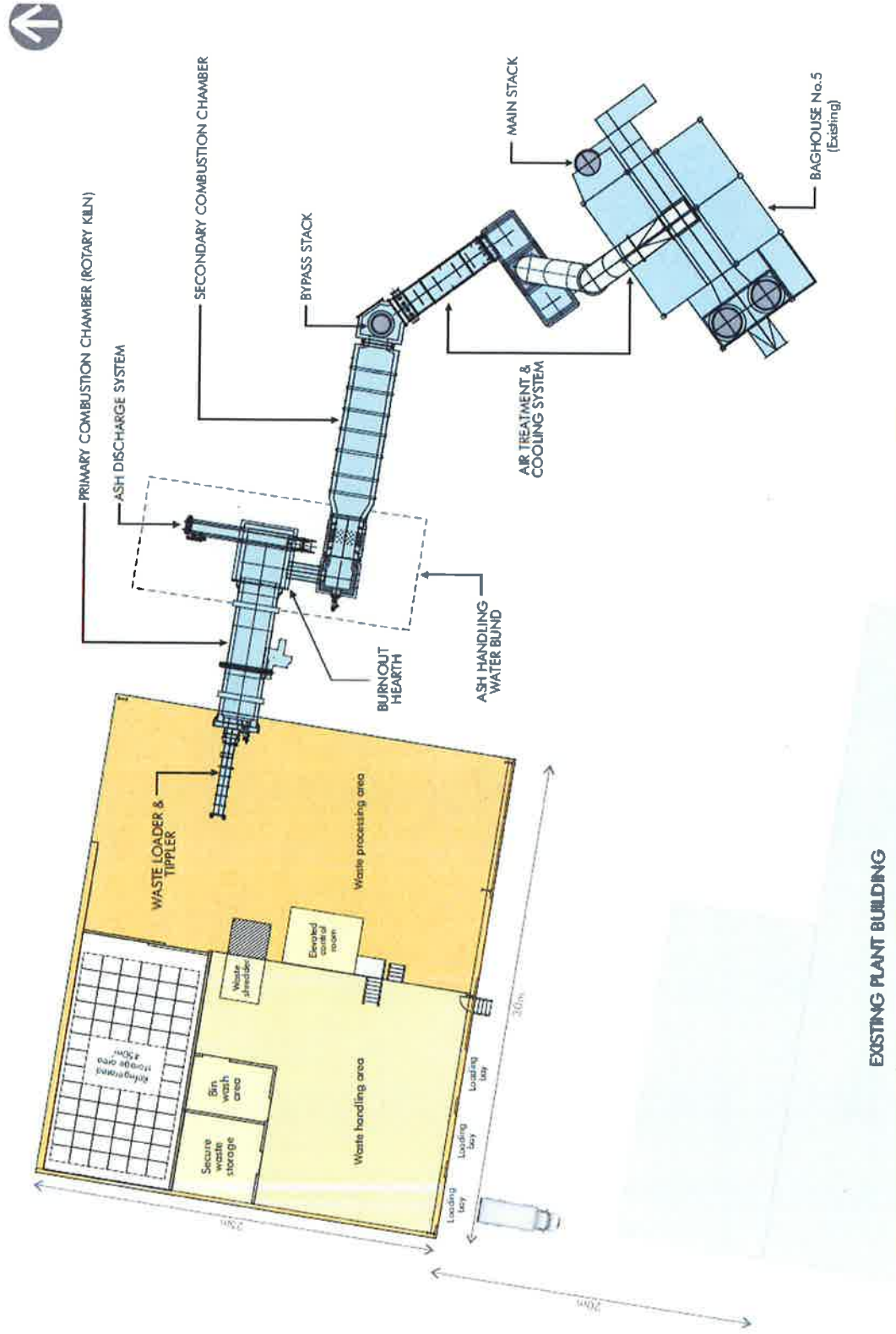


Figure 1: Site Plan

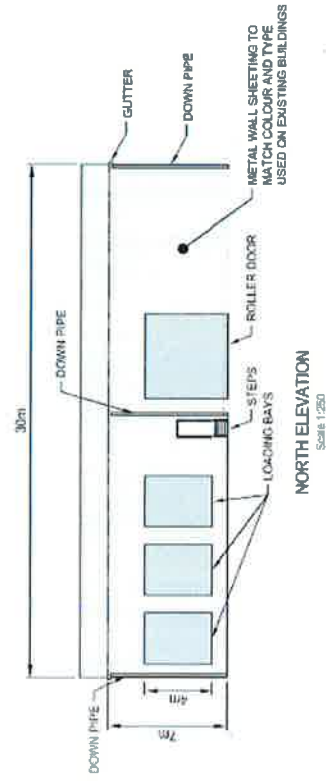
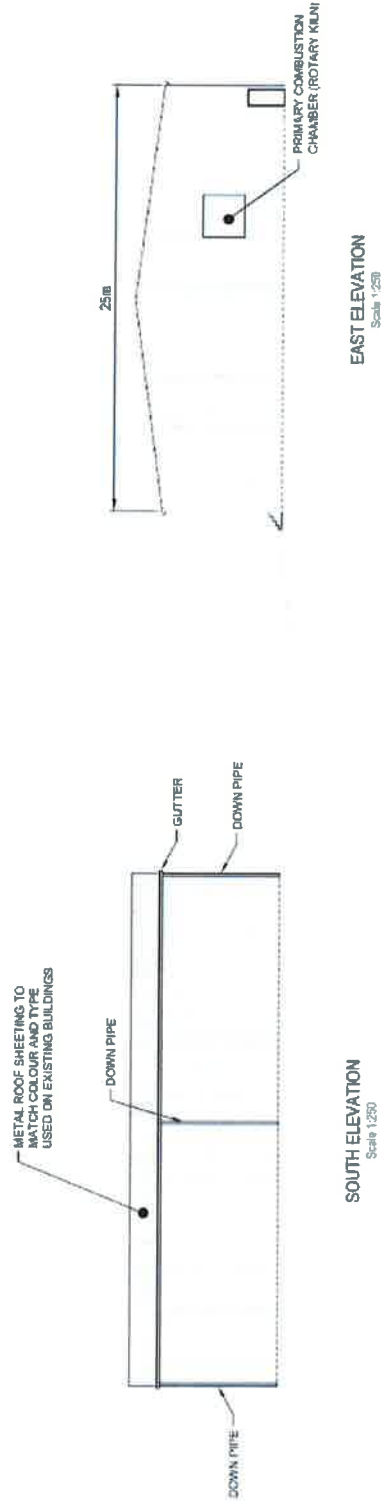


Figure 2: Elevations

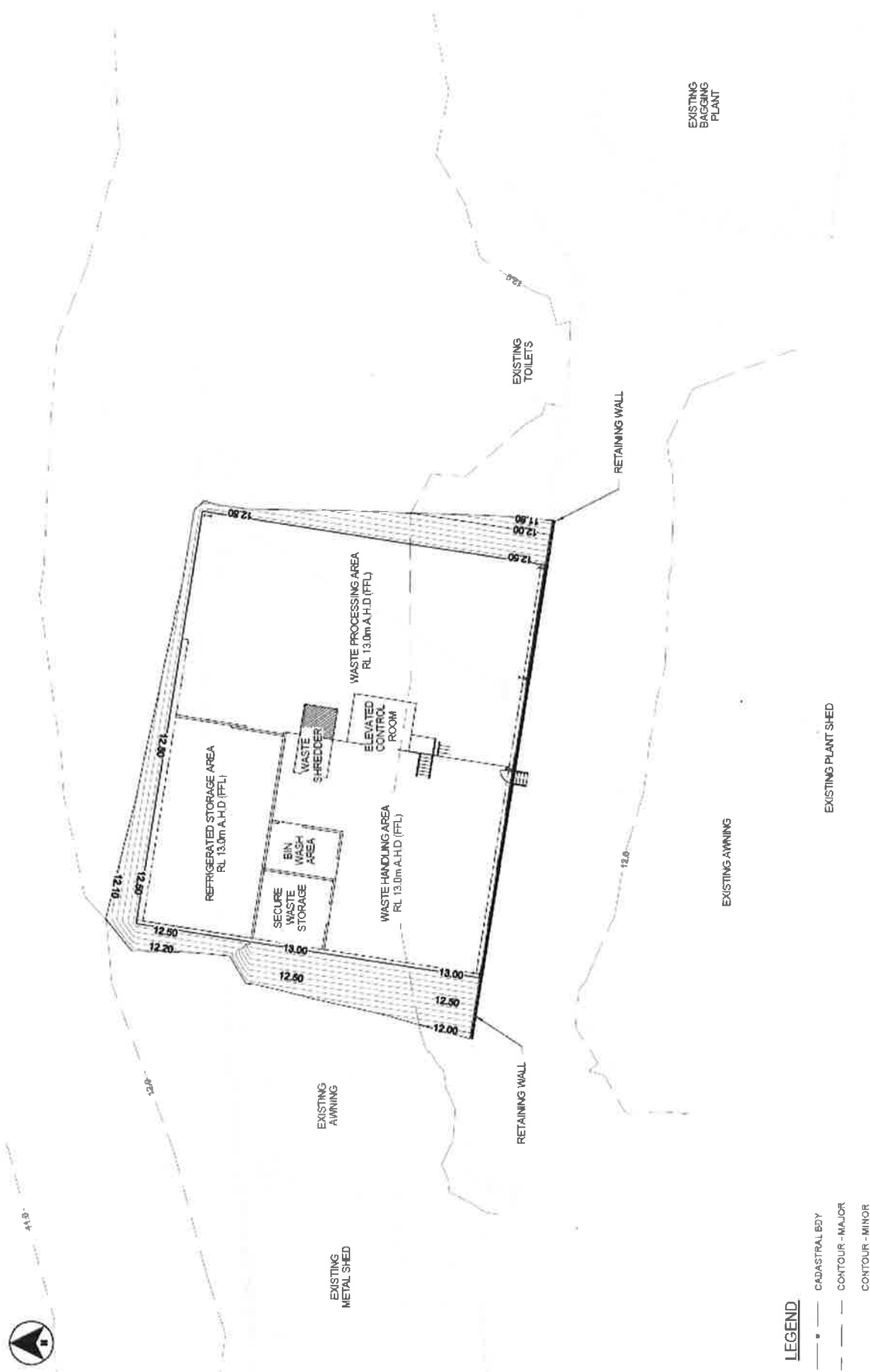


Figure 3: Site Layout Plan

APPENDIX 2
APPLICANT'S MANAGEMENT AND MITIGATION MEASURES

5.0 Management Measures

The Project EIS included a summary of the management measures that will be incorporated into the construction and operation of the Project. Following the receipt and consideration of submissions these management measures were reviewed. The final summary of Project management measures is provided in **Table 3**.

Table 3 Summary of Management Measures

Ref#	Management and Mitigation Measures	Timing
Waste Management		
1.	Throughout the construction and operation of the Project, WA will implement the waste hierarchy principals outlined in the WARR Strategy.	Construction
2.	Ash materials resulting from the thermal treatment process will be disposed of at an offsite landfill licensed to receive such wastes as per the POEO Act.	Operation
3.	WA will not accept wastes for onsite processing which are not defined in the Development Consent or encompassed in the updated EPL 6423.	Operation
4.	WA will ensure that wastes received onsite have been properly classified by the providers of those wastes, and will fulfil its waste tracking requirements as set out in the Protection of the Environment Operations (Waste) Regulation 2014.	Operation
5.	A screening process will be implemented for all waste arriving at the site. No waste will be allowed to be deposited at the site until approval has been provided by the WA operator. A formal screening and approval procedure will be included in the Project Operational Management Plan regarding the screening process. This process will mimic established and mature dross/SPL/scrap inspection and accept/reject procedures.	Operation
6.	WA will ensure that it and any of its transport contractors comply with the Dangerous Goods (Road and Rail) Transport Act 2008, Dangerous Goods (Road and Rail Transport) Regulation 2014, and ADG Code when arranging for the transport of any materials covered by the ADG Code.	Operation
7.	In accordance with EPA requirements, WA will retain any waste sampling and classification results that it obtains for the required interval of time (currently for a minimum 7-years).	Operation
8.	Waste water will be disposed of to the waste water network in accordance with the Trade Waste Agreement with Hunter Water.	Operation
9.	The Project will not receive, store or process any organic solvents (G150) wastes or E-waste.	Operation
Air Quality and Odour		
10.	Existing safeguards to manage air quality impacts, including the existing fabric filter and lime injection system, which will service both the proposed Project and the existing reverb furnace process emissions.	Operation
11.	Additionally, the Project will include real time monitoring and activated carbon injection. The Project will be equipped with an extractive emission monitoring system comprised of oxygen, carbon monoxide and carbon dioxide analysers.	Operation

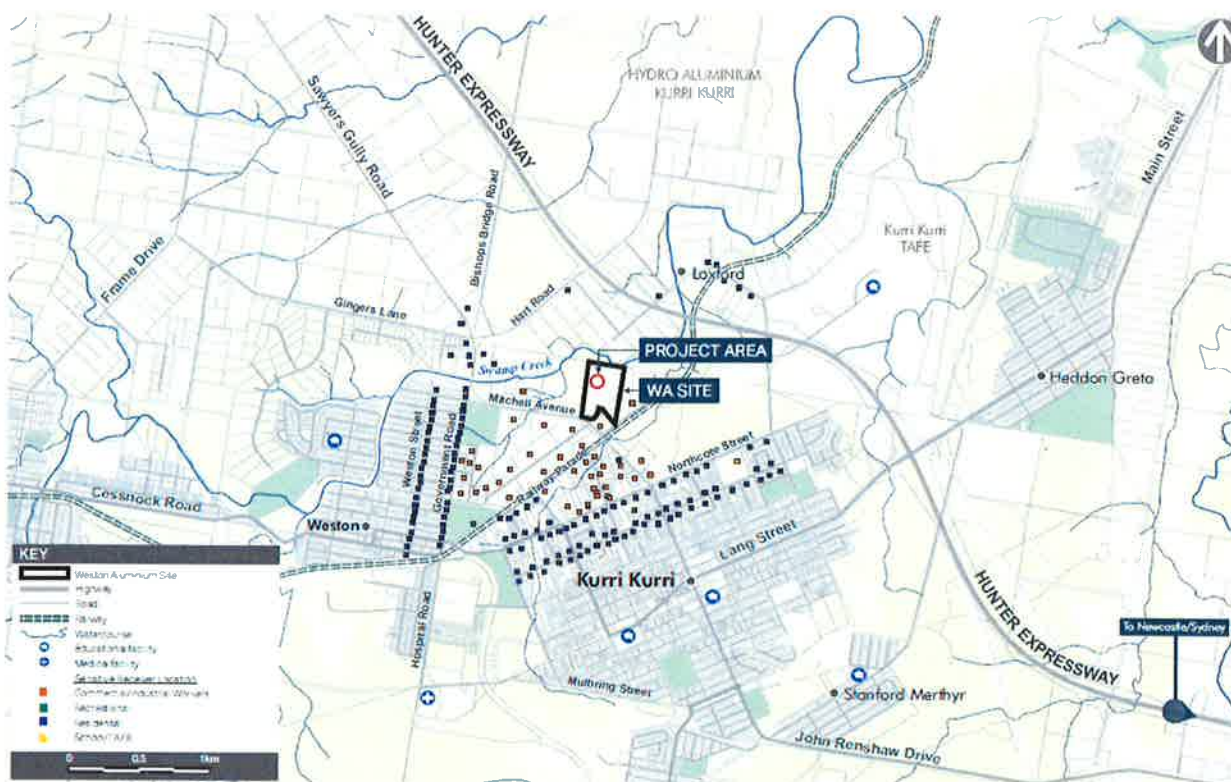
Ref#	Management and Mitigation Measures	Timing
	<ul style="list-style-type: none"> - Relocating any vibration generating plant and equipment away from noise and vibration sensitive receivers in order to minimise any potential vibration impacts; - Turning off plant that is not being used; - Ensuring plant is regularly maintained, and repairing or replacing equipment that becomes noisy; and - Arranging the construction work site to minimise the use of movement alarms on vehicles and mobile plant. 	
20.	<p>Local Road Traffic – Heavy Vehicles Noise Mitigation:</p> <ul style="list-style-type: none"> • The following mitigation measures are proposed in order to minimise the impact from heavy vehicles on local roads: <ul style="list-style-type: none"> - All trucks will be fitted with mufflers and any other noise control equipment in good working order; - As far as practical and safety consideration, truck drivers will avoid: <ul style="list-style-type: none"> ▪ Heavy acceleration and braking; ▪ Compression braking; ▪ Reversing as far as practicable; ▪ High speeds; ▪ Pick-ups and deliveries outside standard construction hours; ▪ Idling outside noise sensitive receivers; and ▪ Truck routes to and from the construction work site will be via arterial routes. • Reversing Alarms: <ul style="list-style-type: none"> - The potential noise impact associated with reversing alarms will be managed and minimised via a combination of proactive driver/operator training and operational procedures. The following mitigation strategies will be undertaken, taking into account that SafeWork NSW Work Health and Safety requirements will need to be satisfied with respect to safety surrounding construction vehicles; - The primary means for minimising reversing alarm noise will be through a dedicated effort on the part of all construction equipment drivers to minimise, wherever feasible, the amount of reversing of their vehicles; - Wherever feasible, turning circles will be created at the end points of vehicle work legs, which will allow trucks to turn and avoid the need for reversing; and - Emphasis will be placed during driver training and site induction sessions on the potential adverse impact of reversing alarms and the need to minimise their use. 	Construction and Operation
21.	The existing site Operational Environmental Management Plan will be in force to manage operational noise.	Operation
Soil and Water		
22.	Where excess spoil is excavated at the Project Area (not foreseen), it will be subject to sampling and classification according to the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014a) prior to being transported offsite to an authorised receiver.	Construction
23.	Erosion and sediment control practices will be incorporated into the CEMP for the Project, in accordance with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) to prevent construction site runoff entering the WA Site stormwater	Construction

Ref#	Management and Mitigation Measures	Timing
	<ul style="list-style-type: none"> All baghouses will be fitted with high differential pressure detection to activate bag switch-over and clogged bag cleaning processes; The existing site EMS will be updated to incorporate the management requirements of the Project; and Dangerous Goods will be transported to and from site in accordance with the ADG Code, the Dangerous Goods (Road and Rail Transport) Act 2008 and the Dangerous Goods (Road and Rail Transport) Regulation 2014. <p>A number of further safety studies will be required to be conducted in accordance with:</p> <ul style="list-style-type: none"> The hazard-related conditions of consent provided by DP&E; The Work Health and Safety Act 2011, associated regulations (including the Work Health and Safety Regulation 2011), and codes of practice; and The Protection of the Environment Operations Act 1997 and associated regulations. 	
34.	<p>The following measures will be implemented to control, minimise and manage risks during all phases of the Project:</p> <ul style="list-style-type: none"> In detailed design, locate product storage areas at separation distances with specific reference to the applicable Australian Standards; Conduct a Fire Safety Study for the Project to determine appropriate fixed and portable fire protection systems for the Project Area; A Final Hazard Analysis will be prepared prior to construction; Develop a Traffic Risk Assessment and a detailed Route Selection study for the dangerous goods transport activities particularly for the transport of dangerous goods to the Project Area; Carry out safety in Design Reviews in accordance with Work Health and Safety Regulation 2011 and Code of Practice – Safe Design of Structures (Safe Work Australia, July 2012); and The flood protection measures identified in the Preliminary Hazard Analysis (AECOM, 2017) including minimum floor levels, flood proofing of buildings and infrastructure and the implementation of operational, emergency and safety plans with respect to flooding will be implemented for the Project. 	Construction and Operation
35.	<p>The following measures will be implemented to control, minimise and manage risks:</p> <ul style="list-style-type: none"> Update the Safety Management System Manual, November 2015 to include the operations and materials associated with the Project prior to the commencement of operation in accordance with the requirements of the Work Health and Safety Regulation 2011; Update the Emergency Response Plan (Weston Aluminium Pty Ltd, November 2015) to include specific responses to the hazard scenarios identified in this PHA and any other safety studies conducted for this Project; Develop and implement an appropriate Safety Management Plan. This should include access by workers to a risk register for all construction activities; Ensure a permit to work system is implemented, in particular where workers may be exposed to high risk activities; Undertake audits on construction activities, and address and communicate any findings to the relevant workers; Ensure the workers have appropriate training and the necessary competencies; and 	Construction and operations.

Ref#	Management and Mitigation Measures	Timing
	<ul style="list-style-type: none"> Adequate sprinkler or foam systems will be installed if the Fire Safety Study indicates these are required; Fully bunded dangerous goods warehouse sections will be maintained so as to limit the spread of fire and prevent the discharge of contaminated fire-water in the event of such an incident; and Training will be provided for staff in correct equipment operation, accident prevention and emergency response (including firefighting). 	
38.	<p>The following additional safeguards will be implemented to limit the consequences and likelihood of a toxic release from class 6.1 dangerous goods:</p> <ul style="list-style-type: none"> Equipment (such as forklifts) will be properly maintained to minimise the risk of damage to packaging; and No transfer operations of class 6.1 materials destined for thermal processing will occur outside the thermal waste processing plant. 	Operation
39.	<p>To control, minimise and manage risks during the post-closure phase of the Project, the following measures will be implemented:</p> <ul style="list-style-type: none"> Develop a decommissioning plan. This should include a project risk register that is available to all workers, including any risk items added during the construction and operations phases; and Keep records of all workplace health and safety information relating to the Project post closure phase; The storage and handling of dangerous goods during the Project will be undertaken in accordance with the relevant Australian Standard for each class of dangerous goods, including those outlined below: <ul style="list-style-type: none"> AS/NZS 3816:1998, Management of clinical and related wastes relating to the management of class 6.1 pharmaceutical substances; HB 202-2000, A management system for clinical and related wastes – Guide to the application of AS/NZS 3816-1998, Management of clinical and related wastes; AS 1940:2004 – The Storage and Handling of Flammable and Combustible Liquids relating to the management of paints, solvents, pharmaceutical and quarantine wastes classified as class 3 substances; AS 3780:2008 – The storage and handling of corrosive substances - management of class 8 pharmaceutical and quarantine wastes classified as corrosive substances; AS/NZS 4452:1997, The storage and handling of toxic substances - management of class 6.1 pharmaceutical substances; AS/NZS 4681:2000 – The storage and handling of Class 9 miscellaneous dangerous goods relating to class 9 pharmaceutical wastes; and AS/NZS 3833:2007 – The Storage and Handling of Mixed Classes of Goods, in Packages and Intermediate Bulk Containers considered for the management of areas where various classes of goods are stored, such as waste preparation areas. 	Post-Operation
Human Health		
40.	All air pollution management, monitoring and pollution prevention systems will be operated to maintain the proposed emissions limits from Stack 5.	Operational

Ref#	Management and Mitigation Measures	Timing
50.	A Stakeholder Consultation Plan will be prepared to detail how the community and key stakeholders will be consulted during the construction and operation of the Project.	Construction and Operation.

APPENDIX 3 SENSITIVE RECEIVERS



APPENDIX 4 TRANSPORT ROUTE

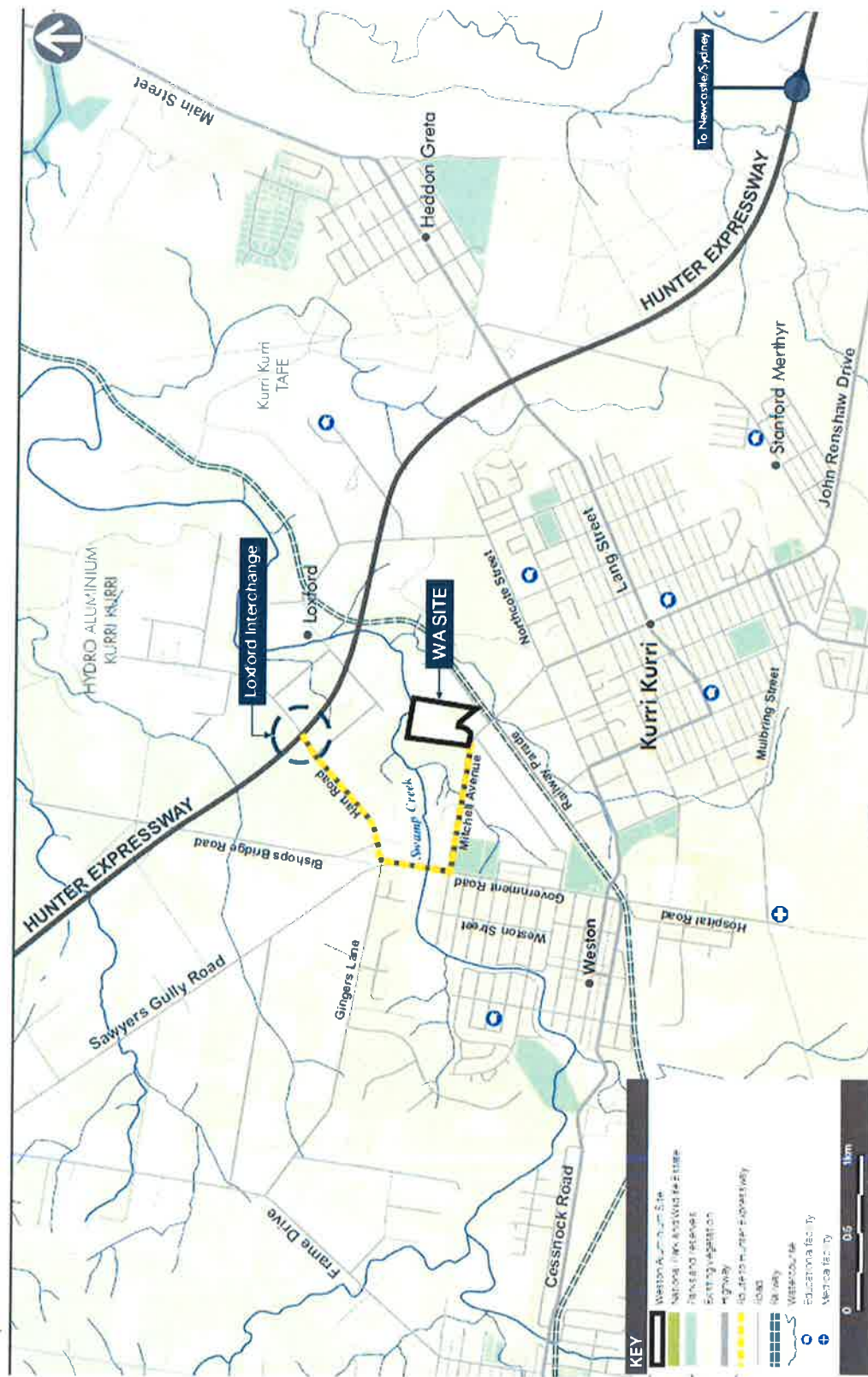


Figure 2: Transport Route

APPENDIX 5 INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

1. A written incident notification addressing the requirements set out below must be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition C11 or, having given such notification, subsequently forms the view that an incident has not occurred.
2. Written notification of an incident must:
 - a. identify the Development and application number;
 - b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
 - c. identify how the incident was detected;
 - d. identify when the applicant became aware of the incident;
 - e. identify any actual or potential non-compliance with conditions of consent;
 - f. describe what immediate steps were taken in relation to the incident;
 - g. identify further action(s) that will be taken in relation to the incident; and
 - h. identify a project contact for further communication regarding the incident.

INCIDENT REPORT REQUIREMENTS

3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
4. The Incident Report must include:
 - a. a summary of the incident;
 - b. outcomes of an incident investigation, including identification of the cause of the incident;
 - c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
 - d. details of any communication with other stakeholders regarding the incident.

Modification of Development Consent

Section 4.55(1A) of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning and Public Spaces, under delegation executed on 9 March 2020, I approve the modification of the development consent referred to in Schedule 1, subject to the conditions in Schedule 2.



Chris Ritchie
Director
Industry Assessments

Sydney 11 September 2020

SCHEDULE 1

Development consent: SSD 7396 granted by the Executive Director, Key Sites and Industry Assessment on 12 December 2018

For the following: Construction and operation of a thermal processing facility to incinerate up to 8,000 tonnes per annum of medical, research, quarantine, pharmaceutical, illicit drug and other wastes

Modification Application: **Modification 1**
SSD-7396-Mod-1

Modification

- Diverting residual ash from landfill

Applicant: Weston Aluminium Pty Ltd

Consent Authority: Minister for Planning and Public Spaces

The Land: 129 Mitchell Avenue, Kurri Kurri (Lot 61 DP 1237125)

SCHEDULE 2

The consent is modified as follows:

In the definitions

1. Replace the definition of Department and Planning Secretary with the following:

Department	Department of Planning, Industry and Environment
Planning Secretary	Secretary of the Department

2. Insert the following definitions in alphabetical order:

MOD 1	The modification application and supporting documentation, including <i>Weston Aluminium Thermal Processing Facility; Resource Recovery of Residual Ash</i> , prepared by AECOM dated 17 July 2020 and the email from Christopher McClung Re: <i>Weston Aluminium SSD 7396 MOD 1 - ash diversion</i> dated 17 August 2020.
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In Part A – Administrative Conditions

3. Renumber existing condition A2(e) as condition A2(f).
4. Insert new Condition A2(e) immediately after Condition A2(d)

A2(e) in accordance with MOD 1

In Part B – Environmental Performance

5. Delete 'and' at the end of Condition B35(f)
6. Renumber existing Condition B35(g) as Condition B35(h)
7. Insert new Condition B35(g) after Condition B35(f)

B35(f) detail procedures to be undertaken to manage the transfer of waste ash including ensuring the ash is transferred in closed containers; and
8. Delete Appendix 2 and replace with a new Appendix 2 as follows:

APPENDIX 2 APPLICANT'S MANAGEMENT AND MITIGATION MEASURES

Table B1: Summary of Management Measures

Ref#	Management and Mitigation Measures	Timing
Waste Management		
1.	Throughout the construction and operation of the Project, WA will implement the waste hierarchy principals outlined in the WARR Strategy.	Construction
2.	Ash materials resulting from the thermal treatment process will be reprocessed and beneficiated for reuse within WA's existing approved processes.	Operation
3.	WA will not accept wastes for onsite processing which are not defined in the Development Consent or encompassed in the updated EPL 6423.	Operation
4.	WA will ensure that wastes received onsite have been properly classified by the providers of those wastes, and will fulfil its waste tracking requirements as set out in the Protection of the Environment Operations (Waste) Regulation 2014.	Operation
5.	A screening process will be implemented for all waste arriving at the site. No waste will be allowed to be deposited at the site until approval has been provided by the WA operator. A formal screening and approval procedure will be included in the Project Operational Management Plan regarding the screening process. This process will mimic established and mature dross/SPL/scrap inspection and accept/reject procedures.	Operation
6.	WA will ensure that it and any of its transport contractors comply with the Dangerous Goods (Road and Rail) Transport Act 2008, Dangerous Goods (Road and Rail Transport) Regulation 2014, and ADG Code when arranging for the transport of any materials covered by the ADG Code.	Operation
7.	In accordance with EPA requirements, WA will retain any waste sampling and classification results that it obtains for the required interval of time (currently for a minimum 7-years).	Operation
8.	Waste water will be disposed of to the waste water network in accordance with the Trade Waste Agreement with Hunter Water.	Operation
9.	The Project will not receive, store or process any organic solvents (G150) wastes or E-waste.	Operation
Air Quality and Odour		
10.	Existing safeguards to manage air quality impacts, including the existing fabric filter and lime injection system, which will service both the proposed Project and the existing reverb furnace process emissions.	Operation
11.	Additionally, the Project will include real time monitoring and activated carbon injection. The Project will be equipped with an extractive emission monitoring system comprised of oxygen, carbon monoxide and carbon dioxide analysers.	Operation
12.	Analysers will be used for monitoring combustion efficiency calculations, process control and alarm generation.	Operation
13.	Exhaust gases from the secondary chamber, once cooled, will receive an injection of both activated carbon and lime into the fabric filter exhaust inlet duct. Here, exhaust gases will undergo filtration with activated carbon and lime for particulate, acid gas, heavy metals and dioxin control within the plant's existing fabric filter. Treated exhaust gases will then be discharged to the atmosphere from the existing stack.	Operation

Ref#	Management and Mitigation Measures	Timing
14.	The facility will include an emergency bypass stack in which hot combustion gases may be vented directly to the atmosphere during emergency situations or power failure. The proposed bypass stack will be equipped with a fail-safe pneumatically assisted and counterweighted insulated stack cap.	Operation
15.	All air quality monitoring, management and pollution control systems will be operated to maintain emissions below proposed emissions limit for Stack 5 and existing emissions limits for all other stacks.	Operation
Traffic and Transport		
16.	A Construction Traffic Management Plan will be prepared and implemented prior to the construction phase of the Project as part of the CEMP. This will include the guidelines, general requirements and principles of traffic management to be implemented during the construction phase to minimise the potential for traffic impacts on Mitchell Avenue. Specifically, no construction traffic will be allowed to park or idle on the surrounding road network.	Construction
17.	The WA Site's existing Operational Environmental Management Plan will be updated to incorporate consideration of the Project's operational traffic requirements. Measures that will be implemented to manage operational traffic include: <ul style="list-style-type: none"> • An induction process for drivers; • Time of day travel restrictions in accordance with the Development Consent and EPL; • The requirement to follow approved operational access and egress routes from the Hunter Expressway; and • The identification of area for light vehicle overflow parking within the boundaries of the WA site. 	Operation
Noise and Vibration		
18.	Construction Hours – Works will be limited to standard construction hours where possible.	Construction
19.	Standard Mitigation Measures: All construction activities associated with the development of the Project will be subject to the standard noise and vibration mitigation measures described below: <ul style="list-style-type: none"> • The contractor will, where reasonable and feasible, apply best practice noise mitigation measures including: <ul style="list-style-type: none"> – Maximising the offset distance between noisy plant items and nearby noise sensitive receivers; – Avoiding incidents of noisy plants working simultaneously close together and adjacent to sensitive receivers, where practicable; – Orientating where possible, equipment with directional noise emissions away from sensitive receivers; – Locating noisy plant away from potentially noise affected neighbours or behind barriers, such as sheds or walls; – Loading and unloading out away from sensitive receivers, where practicable; – Carrying out maintenance work on construction plants with the potential to generate noise impacts away from noise sensitive receivers and confined to standard daytime construction hours, where possible; – Relocating any vibration generating plant and equipment away from noise and vibration sensitive receivers in order to minimise any potential vibration impacts; – Turning off plant that is not being used; – Ensuring plant is regularly maintained, and repairing or replacing equipment that becomes noisy; and – Arranging the construction work site to minimise the use of movement alarms on vehicles and mobile plant. 	Construction

Ref#	Management and Mitigation Measures	Timing
20.	<p>Local Road Traffic – Heavy Vehicles Noise Mitigation:</p> <ul style="list-style-type: none"> The following mitigation measures are proposed in order to minimise the impact from heavy vehicles on local roads: <ul style="list-style-type: none"> All trucks will be fitted with mufflers and any other noise control equipment in good working order; As far as practical and safety consideration, truck drivers will avoid: <ul style="list-style-type: none"> Heavy acceleration and braking; Compression braking; Reversing as far as practicable; High speeds; Pick-ups and deliveries outside standard construction hours; Idling outside noise sensitive receivers; and Truck routes to and from the construction work site will be via arterial routes. Reversing Alarms: <ul style="list-style-type: none"> The potential noise impact associated with reversing alarms will be managed and minimised via a combination of proactive driver/operator training and operational procedures. The following mitigation strategies will be undertaken, taking into account that SafeWork NSW Work Health and Safety requirements will need to be satisfied with respect to safety surrounding construction vehicles; The primary means for minimising reversing alarm noise will be through a dedicated effort on the part of all construction equipment drivers to minimise, wherever feasible, the amount of reversing of their vehicles; Wherever feasible, turning circles will be created at the end points of vehicle work legs, which will allow trucks to turn and avoid the need for reversing; and Emphasis will be placed during driver training and site induction sessions on the potential adverse impact of reversing alarms and the need to minimise their use. 	Construction and Operation
21.	The existing site Operational Environmental Management Plan will be in force to manage operational noise.	Operation
Soil and Water		
22.	Where excess spoil is excavated at the Project Area (not foreseen), it will be subject to sampling and classification according to the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014a) prior to being transported offsite to an authorised receiver.	Construction
23.	Erosion and sediment control practices will be incorporated into the CEMP for the Project, in accordance with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) to prevent construction site runoff entering the WA Site stormwater system, or the nearby Swamp Creek.	Construction
24.	<p>To minimise the potential for contamination to occur during construction works the following measures will be employed during construction works:</p> <ul style="list-style-type: none"> Excavated spoil will be stored so as to prevent its uncontrolled release; and Construction works and laydown areas will be confined to hardstand areas where reasonable and practicable to do so. 	Construction

Ref#	Management and Mitigation Measures	Timing
25.	Groundwater interception will be avoided where possible.	Construction
26.	Spill kits will be available at the construction site.	Construction and Operation
27.	All liquids will be stored in appropriately bunded areas in accordance with Safety Data Sheet and manufacture requirements.	Construction and Operation
28.	Refuelling activities will be undertaken in existing dedicated refuelling bunds.	Construction and Operation
29.	The existing OEMP prepared for the Facility provides a framework to effectively manage the potential pollution of soils and water during the operation of the Project. The OEMP will be updated where relevant to incorporate the Project in consultation with DP&E. The site Surface Water Management Plan will also be updated to incorporate the relevant compliance requirements of the Project.	Operation
30.	During operations WA will continue to comply with any water quality management measures set out in EPL 6423. This may include stormwater monitoring (such as that currently undertaken at the WA Site), as well as the appropriate storage, enclosing, bunding and covering of SPL material and pharmaceutical wastes.	Operation
31.	WA will continue to liaise with Hunter Water to ensure the operational phase of the Project is included in a Trade Waste Agreement with Hunter Water.	Operation
32.	<p>The CEMP will include of procedure for the management of contamination or potential contamination during site work, including the following measures as a minimum:</p> <ul style="list-style-type: none"> • Should any potential anthropomorphic contaminated material (e.g. chitter, slag, building waste (brick or similar) or any odorous materials) the contractor will be required to cease work in the vicinity to the material; • Sampling will take place to identify the content of the material; • Material will be managed pursuant to the results of the sampling analysis with any contaminated material handled and managed accordingly; and • Regardless of potential to contain contamination, any excess material generated by construction work that needs to be disposed of offsite will be classified accordingly. 	Construction
Hazards		
33.	<p>The following practices currently employed at the WA Site will continue during the operation of the Project:</p> <ul style="list-style-type: none"> • Baghouse No. 5 will be fitted with a real-time, continuous particulate monitoring system; • All baghouses will be fitted with high differential pressure detection to activate bag switch-over and clogged bag cleaning processes; • The existing site EMS will be updated to incorporate the management requirements of the Project; and • Dangerous Goods will be transported to and from site in accordance with the ADG Code, the Dangerous Goods (Road and Rail Transport) Act 2008 and the Dangerous Goods (Road and Rail Transport) Regulation 2014. <p>A number of further safety studies will be required to be conducted in accordance with:</p>	Operation

Ref#	Management and Mitigation Measures	Timing
	<ul style="list-style-type: none"> The hazard-related conditions of consent provided by DP&E; The Work Health and Safety Act 2011, associated regulations (including the Work Health and Safety Regulation 2011), and codes of practise; and The Protection of the Environment Operations Act 1997 and associated regulations. 	
34.	<p>The following measures will be implemented to control, minimise and manage risks during all phases of the Project:</p> <ul style="list-style-type: none"> In detailed design, locate product storage areas at separation distances with specific reference to the applicable Australian Standards; Conduct a Fire Safety Study for the Project to determine appropriate fixed and portable fire protection systems for the Project Area; A Final Hazard Analysis will be prepared prior to construction; Develop a Traffic Risk Assessment and a detailed Route Selection study for the dangerous goods transport activities particularly for the transport of dangerous goods to the Project Area; Carry out safety in Design Reviews in accordance with Work Health and Safety Regulation 2011 and Code of Practice – Safe Design of Structures (Safe Work Australia, July 2012); and The flood protection measures identified in the Preliminary Hazard Analysis (AECOM, 2017) including minimum floor levels, flood proofing of buildings and infrastructure and the implementation of operational, emergency and safety plans with respect to flooding will be implemented for the Project. 	Construction and Operation
35.	<p>The following measures will be implemented to control, minimise and manage risks:</p> <ul style="list-style-type: none"> Update the Safety Management System Manual, November 2015 to include the operations and materials associated with the Project prior to the commencement of operation in accordance with the requirements of the Work Health and Safety Regulation 2011; Update the Emergency Response Plan (Weston Aluminium Pty Ltd, November 2015) to include specific responses to the hazard scenarios identified in this PHA and any other safety studies conducted for this Project; Develop and implement an appropriate Safety Management Plan. This should include access by workers to a risk register for all construction activities; Ensure a permit to work system is implemented, in particular where workers may be exposed to high risk activities; Undertake audits on construction activities, and address and communicate any findings to the relevant workers; Ensure the workers have appropriate training and the necessary competencies; and Implement actions/risk reduction strategies as identified through Safety in Design reviews. 	Construction and operations.
36.	<p>During operations, the following measures will be implemented:</p> <ul style="list-style-type: none"> Update the site Safety Management Plan. This should include access by workers to a risk register for all operational activities; Update the site Emergency Response Plan to ensure a co-ordinated response to the hazard scenarios identified in this assessment; 	Operation

Ref#	Management and Mitigation Measures	Timing
	<ul style="list-style-type: none"> • Update the site Operational Environmental Management Plan; • Undertake audits on operational activities, and address and communicate any findings to the relevant workers; • Ensure workers have appropriate training and necessary competencies; • Implement appropriate maintenance programs to minimise potential for equipment failures; • Notify SafeWork NSW of any WHS Regulation Schedule 15 chemicals that are likely to exceed 10 percent of the threshold quantity; • Prepare/update any placards, manifests and emergency plans as required for chemicals exceeding the WHS Regulation Schedule 11 placard or manifest quantities; and • Update the onsite dangerous goods register and Safety Data Sheet register, as well as provide updated dangerous goods notifications to SafeWork NSW as required. 	
37.	<p>The following safeguards will be implemented to limit the consequences and likelihood of a fire occurring at the Project Area's dangerous goods store:</p> <ul style="list-style-type: none"> • The Project Area will be continuously staffed with appropriate security fencing and/or other systems to resist malicious attack; • The proposed warehouse building will incorporate an electrical system designed to meet relevant explosion protection standards; • No equipment will operate in dangerous goods warehouses areas that might generate friction or other sources of heat contributing to the risk of ignition; • A strict smoking ban will continue to be enforced on the WA Site; • Process areas will contain properly maintained equipment (such as forklifts) suitable for the relevant hazardous area classification; • All incompatible dangerous goods classes will be completely segregated with appropriate fire separation distances created and maintained (including use of fire walls etc. where necessary) according to AS 1940:2004 – The Storage and Handling of Flammable and Combustible Liquids; • All spills will be quickly and completely cleaned up; • No dangerous goods will be accepted at the Project Area unless they are packaging complying with the ADG Code and the requirements of the WHS Regulation, with steel drums preferred where possible to limit potential for damage and leakage; • Adequate sprinkler or foam systems will be installed if the Fire Safety Study indicates these are required; • Fully bunded dangerous goods warehouse sections will be maintained so as to limit the spread of fire and prevent the discharge of contaminated fire-water in the event of such an incident; and • Training will be provided for staff in correct equipment operation, accident prevention and emergency response (including firefighting). 	Operation

Ref#	Management and Mitigation Measures	Timing
38.	<p>The following additional safeguards will be implemented to limit the consequences and likelihood of a toxic release from class 6.1 dangerous goods:</p> <ul style="list-style-type: none"> • Equipment (such as forklifts) will be properly maintained to minimise the risk of damage to packaging; and • No transfer operations of class 6.1 materials destined for thermal processing will occur outside the thermal waste processing plant. 	Operation
39.	<p>To control, minimise and manage risks during the post-closure phase of the Project, the following measures will be implemented:</p> <ul style="list-style-type: none"> • Develop a decommissioning plan. This should include a project risk register that is available to all workers, including any risk items added during the construction and operations phases; and • Keep records of all workplace health and safety information relating to the Project post closure phase; • The storage and handling of dangerous goods during the Project will be undertaken in accordance with the relevant Australian Standard for each class of dangerous goods, including those outlined below: <ul style="list-style-type: none"> - AS/NZS 3816:1998, Management of clinical and related wastes relating to the management of class 6.1 pharmaceutical substances; - HB 202-2000, A management system for clinical and related wastes – Guide to the application of AS/NZS 3816-1998, Management of clinical and related wastes; - AS 1940:2004 – The Storage and Handling of Flammable and Combustible Liquids relating to the management of paints, solvents, pharmaceutical and quarantine wastes classified as class 3 substances; - AS 3780:2008 – The storage and handling of corrosive substances - management of class 8 pharmaceutical and quarantine wastes classified as corrosive substances; - AS/NZS 4452:1997, The storage and handling of toxic substances - management of class 6.1 pharmaceutical substances; - AS/NZS 4681:2000 – The storage and handling of Class 9 miscellaneous dangerous goods relating to class 9 pharmaceutical wastes; and - AS/NZS 3833:2007 – The Storage and Handling of Mixed Classes of Goods, in Packages and Intermediate Bulk Containers considered for the management of areas where various classes of goods are stored, such as waste preparation areas. 	Post-Operation
40.	<ul style="list-style-type: none"> • The Shredder would be operated in a negative pressure environment. Following the addition of waste material to the shredder, the shredder hood would be closed effectively sealing the shredder and preventing the escape of any material during the shredding process. A bin is placed under the shredder to capture shredded material following its processing. The shredder is designed such that the shredder bin fits tightly under the shredder to prevent material escape. • During the operation of the shredder, air is drawn from the shredder in order to maintain a negative pressure environment. This air is directed to either: <ul style="list-style-type: none"> - The primary combustion chamber for thermal treatment if the combustion chamber is in operation; or 	Operational

Ref#	Management and Mitigation Measures	Timing
	- Passed through a High Efficiency Particulate Air (HEPA) filter before release to ensure any airborne material is captured.	
41.	The following would be implemented to prevent cross contamination of waste streams: <ul style="list-style-type: none"> • Wastes associated with the project to be transported, stored and processed separately to SPL and dross material; • Separate processing facilities would be used to treat each waste stream. No dross or SPL material would be treated by the project and no medical waste would be treated in the existing facility; and • Storage and handling procedures unique to each waste type (including procedures currently in place at WA) would be implemented across the site to prevent loss of containment. 	Operational
42.	To prevent fire or explosion resulting from excessively hot exhaust gas coming into contact with activated carbon the following would be implemented: <ul style="list-style-type: none"> • Preliminary heat exchanger to remove excess heat from exhaust gas following release from secondary combustion chamber; • Forced air cooler to inject ambient air to further reduce temperature of exhaust gas following the heat exchanger; • Water spray system would automatically operate if the fabric filter inlet temperature were to exceed the deemed maximum operate; • If the exhaust gas process temperatures were to exceed 230°C at the baghouse for any reason then the flow of activated carbon would automatically cease and the exhaust gases would bypass the fabric filter eliminating any risk of fire or explosion; • Programmable Logic Controller (PLC) would be utilised to monitor the operation of the plant in real-time allowing systems responses (shutdowns) to be implemented immediately in the event of 'upset' conditions; and • The system would utilise high quality, high ignition temperature activated carbon specifically designed for combustion flue gas applications. 	Operational
Human Health		
43.	All air pollution management, monitoring and pollution prevention systems will be operated to maintain the proposed emissions limits from Stack 5.	Operational
Biodiversity		
44.	Limit the construction disturbance footprint area of the Project as far as possible through the use of flagging, to restrict plant and machinery movements.	Construction
45.	Minimise soil transportation within, or out of the Project footprint to reduce the potential for weed spread.	Construction
46.	Stockpile or store construction materials within the existing hardstand areas of the WA Site.	Construction
47.	Apply appropriate erosion and sedimentation controls around the Project Area during construction to prevent impacts to downstream riparian habitats.	Construction

Ref#	Management and Mitigation Measures	Timing
48.	A clearing procedure will be prepared which details the methods to be implemented during clearing. This should include suitable protocols in case of any fauna found during clearance works. Such as procedure to contact suitable fauna handlers/ecologists to rescue, relocate or euthanize any fauna.	Construction
Heritage		
49.	<p>Aboriginal Cultural Heritage:</p> <ul style="list-style-type: none"> Although no archaeological heritage items have previously been identified within the Project disturbance area or immediate surrounds, should an artefact or item of Aboriginal cultural heritage be discovered during construction works, the following standard procedure should be adopted: <ul style="list-style-type: none"> Cease all works immediately in the area to prevent any further impacts to the site; Notify the OEH; Engage a suitably qualified archaeologist and Registered Aboriginal Parties (RAP) to determine the nature, extent and significance of the site and provide appropriate management advice. Management action(s) will vary according to the type of evidence identified, its significance (both scientific and cultural) and the nature of potential impacts; Prepare and submit an AHIMS site card for the site; and In the event that potential human skeletal remains are identified within the Project area at any point during the life of the Project, all work in the vicinity of the remains should cease immediately and OEH should be notified for further instruction. 	Construction
50.	<p>Non-Aboriginal Heritage:</p> <ul style="list-style-type: none"> Should any items of potential cultural heritage significance be uncovered during earthworks, the immediate area of the potential find will be isolated and the heritage officer at Cessnock City Council contacted for advice. 	Construction
Visual Amenity		
51.	The waste processing building will be clad in green Colorbond and the use of reflective materials will be avoided where possible.	Design / Construction
52.	Exterior lighting will be designed and constructed in accordance with <i>Australian Standard 4282 – Control of Obtrusive Effects and Outdoor Lighting</i> .	Design / Construction
Consultation		
53.	A Stakeholder Consultation Plan will be prepared to detail how the community and key stakeholders will be consulted during the construction and operation of the Project.	Construction and Operation.

**End of modification
(SSD 7396 MOD 1)**