

**Annual Review
&
Annual Rehabilitation Report
1 July 2024 – 30 June 2025**



Toongi Trachyte "The Ore Body", 8th November 2024

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Definitions

Term	Definition
ACCU	Australian Carbon Credit Units (issued by Clean Energy Regulator)
ASM	Australian Strategic Materials Ltd (formerly known as AZL)
ASMH	Australian Strategic Materials (Holdings) Ltd - a wholly owned subsidiary of ASM
AZL	Australian Zirconia Ltd
BAM	Biodiversity Assessment Method (2020)
BCS	Biodiversity, Conservation and Science (Environment & Heritage Group is part of DPE)
BCT	Biodiversity Conservation Trust (Statutory authority under E&H)
BOA	Biodiversity Offset Area
BOM	Bureau of Meteorology
CaCO ₃	Calcium carbonate
CCC	Community Consultative Committee
CPVP	Conservation Property Vegetation Plan
DAWE	Australian Government – Department of Agriculture, Water and Environment
DCCEEW	Australian Government – Department of Climate Change, Energy, the Environment and Water
DP	Dubbo Project (formerly known as DZP - Dubbo Zirconia Project)
DPE	Department of Planning and Environment (NSW Government)
DPI-Water	Water – NSW Department of Primary Industries
DRC	Dubbo Regional Council
DS	Dams Safety (NSW Government)
EC	Electrical Conductivity
EEC	Endangered ecological community
EES	Environment Energy & Science Group (part of DPIE - contains former OEH, EPA)
EIS	Environmental Impact Statement
EP&A	<i>Environment Planning and Assessment Act 1979</i>
EPA	Environment Protection Authority
EPBC	<i>Environment Protection & Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence
ERML	Environmental Radiation Monitoring Location
GHG	Greenhouse Gas
HEC	Hyundai Engineering Corporation
HVAS	High volume air sampler
LDP	Licensed discharge point
LFA	Landscape function analysis
LLS	Local Land Services
LOR	Limit of Reporting
LRSF	Liquid Residue Storage Facility
MEG	Mining Exploration & Geoscience
Mining Act	<i>Mining Act 1992</i>
ML	Mining Lease

Term	Definition
MOD1	Modification 1 of SSD-5251 Consent
NGERS	National Greenhouse and Energy Reporting Scheme
NMP	Noise Management Plan
WNSW	Water NSW
PM10	Particulate matter 10 microns and smaller
PTWL	Pink-tailed Worm-lizard (<i>Aprasia parapulchella</i>)
PVP	Property Vegetation Plan
RAP	Registered Aboriginal Party
REE	Rare Earth Elements
RMP	Rehabilitation Management Plan
ROM	Run of Mine
SEC	Salt Encapsulation Cell
SEEC	Strategic Environmental and Engineering Consulting
SRSF	Solid Residue Storage Facility
TARP	Trigger action response plan
TfNSW	Transport for NSW
TEOM	Tapered Element Oscillating Microbalance
TIM	Total Insoluble Matter
TPC	Toongi Pastoral Company Pty Ltd
TSP	Total suspended particulates
VPA	Voluntary Planning Agreement
WAL	Water access licence
WHS	Workplace Health & Safety
WRE	Waste Rock Emplacement

Title Block

Table 1: Annual Review Title Block

Name of operation	Dubbo Project
Name of operator	Australian Strategic Materials (Holdings) Ltd
Development consent / project approval #	SSD-5251
Name of holder of development consent / project approval	Australian Strategic Materials (Holdings) Ltd
Mining lease #	ML 1724
Name of holder of mining lease	Australian Strategic Materials (Holdings) Ltd
Water licence #	WALs; 19994, 9191, 3396, 36409, 3412, 30259, 36790, 36791
Name of holder of water licence	Australian Strategic Materials (Holdings) Ltd
RMP start date	TBA
RMP end date	TBA
Annual Review start date	1 July 2024
Annual Review end date	30 June 2025
<p>I, Dale Josephson, certify that this audit report is a true and accurate record of the compliance status of the Dubbo Project for the period 1 July 2024 to 30 June 2025 and that I am authorised to make this statement on behalf of Australian Strategic Materials (Holdings) Ltd.</p> <p>Note.</p> <p>a) The Annual Review is an ‘environmental audit’ for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</p> <p>b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).</p>	
Name of authorised reporting officer	Dale Josephson
Title of authorised reporting officer	ASM Project Director
Signature of authorised reporting officer	
Date	23 September 2025

1 Statement of Compliance

Table 2 provides a statement of compliance status for Australian Strategic Materials (Holdings) Ltd (ASMH) with its project approval (SSD) and mining lease (ML), as at the end of the reporting period.

Table 2: Statement of Compliance

Were all conditions of the following approvals complied with?	
SSD-5251	YES
ML 1724	YES

Table 3 provides a summary of approval conditions not complied with as at the end of the reporting period.

Table 3: Non-Compliances

Relevant approval	Condition #	Condition description (summary)	Compliance status	Comment	Relevant Section
N/A					

Compliance status key for Table 3

Risk level	Colour Code	Description
High	Non-compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	Non-compliant	Non-compliance with: potential for serious environmental consequences, but is unlikely to occur; or potential for moderate environmental consequences, but is likely to occur
Low	Non-compliant	Non-compliance with: potential for moderate environmental consequences, but is unlikely to occur; or potential for low environmental consequences, but is likely to occur
Administrative non-compliance	Non-compliant	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

2 Introduction

2.1 Dubbo Project

The Dubbo Project has not yet commenced construction on site, however, this Annual Review reports on environmental management activities undertaken by Australian Strategic Materials (Holdings) Ltd (ASMH) at the Dubbo Project during the financial year (FY) 2024-2025, and provides details on activities proposed for FY 2025/2026. The report has been produced in accordance with the Post-approval requirements for State significant mining developments - Annual Review Guideline (DPE, October 2015) to meet the annual reporting requirements conditioned in the ASMH Mining Lease (ML 1724) and Project Approval (SSD-5251). See Figure 1.

The Dubbo Project, is a long-term polymetallic resource of rare earth elements, zirconium, niobium and hafnium. The Project represents an alternative and reliable source of the critical minerals and rare earths needed to de-risk and relieve bottle-necking in the global supply chain.

ASMH intends to develop the Dubbo Project to produce metal oxides in the form of chemicals, powders and metals at the Dubbo site. These products will be available in a range of standard and customised specifications, based on market requirements. Significant successful test work to optimise oxide recovery has been completed in partnership with the Australian Nuclear Science and Technology Organisation (ANSTO).

Long-term, the materials produced from the Dubbo Project will be used for refining into critical metals at ASM's proposed metals plants, the first of which is operating in the Ochang Province, South Korea.

The Dubbo Project was approved as SSD-5251 by the NSW Planning Assessment Commission (PAC) on 28 May 2015 and will comprise a small scale open cut mine supplying ore containing rare metals and rare earth elements to a processing plant near the locality of Toongi, approximately 25km south of Dubbo (the Dubbo Project Site) (see Figure 2).

Dubbo Project Modification 1 was sought from DPE and approved and approved on 2 March 2023. Consolidated consent conditions have been issued.

ASM identified opportunities to optimise the design of the project to maximise operational efficiencies at the mine. The key changes included adjustments to the site layout to accommodate additional plant and the relocation of infrastructure areas.

The Dubbo Project is yet to commence construction and thus there has been no rehabilitation activity to report, other than natural regeneration of grassy box woodland species in the biodiversity offsets.

Annual extraction of ore from the open cut is planned to be approximately one million tonnes which could generate approximately 28 000t of export product. Waste residues produced by the processing operations will be managed in residue storage facilities (on site), designed to contain and encapsulate them.

The Dubbo Project also includes the construction of a water pipeline between the processing plant and the Macquarie River and Sweet Water bore, a pipeline to carry natural gas between Dubbo and the Dubbo Project Site, a 132kV electricity transmission line from Geurie substation to site and upgrades/construction of the following linear infrastructure.

- Toongi Road.
- Obley Road
- the Toongi-Dubbo section of the currently disused Dubbo-Molong Rail Line.
- And water pipelines.

Collectively, these are referred to as the Dubbo Project linear infrastructure.

2.2 Mine Contacts

The primary contacts for the Dubbo Project during the review period are detailed in Table 4.

Table 4. Dubbo Project Key Contacts

Key Contact	Position	Contact Details
Chris Jordaan	Chief Operating Officer	PO Box 768 West Perth WA 6005 Phone (08) 9200 1681
Dale Josephson	Project Director	PO Box 768 West Perth WA 6005 Phone: 0458 034 846
Community Information Line	General Manager Toongi Pastoral Company	(02) 6882 2866

Figure 1: Dubbo Project – Local Setting

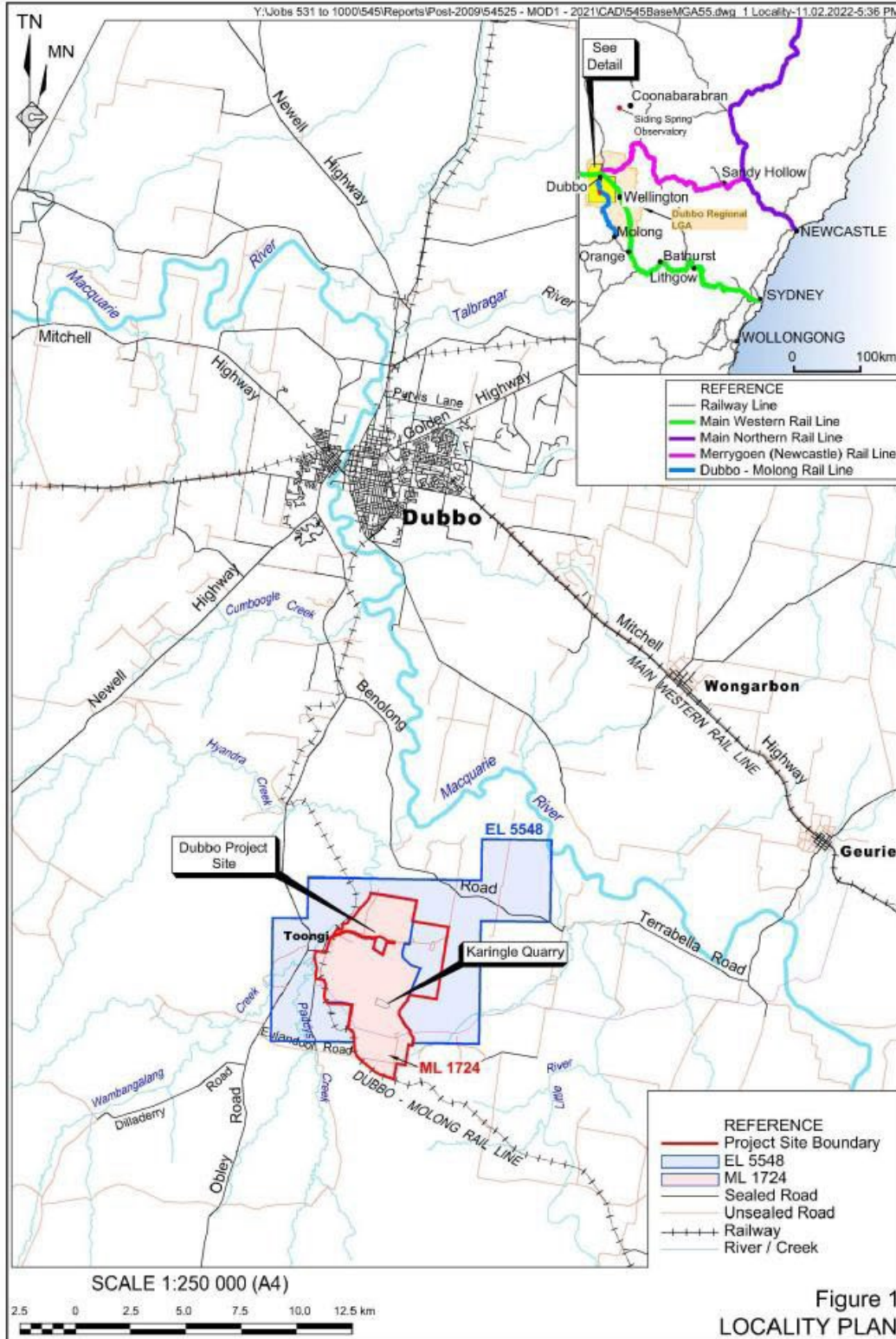


Figure 2: Dubbo Project – Modified Site Layout

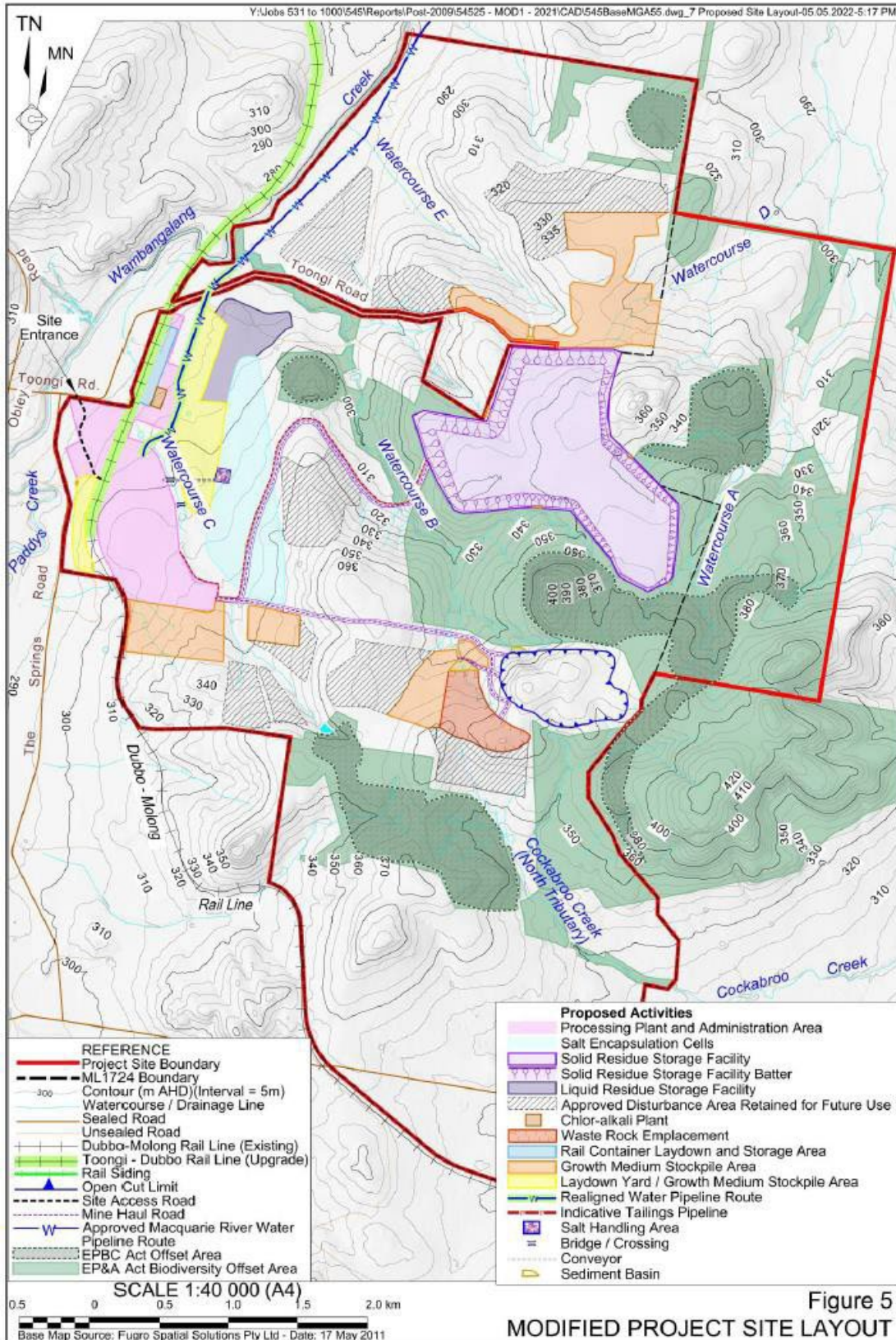


Figure 3: Dubbo Project – Processing Plant Modification



Figure 4: Dubbo Project – Modified Disturbance Footprint

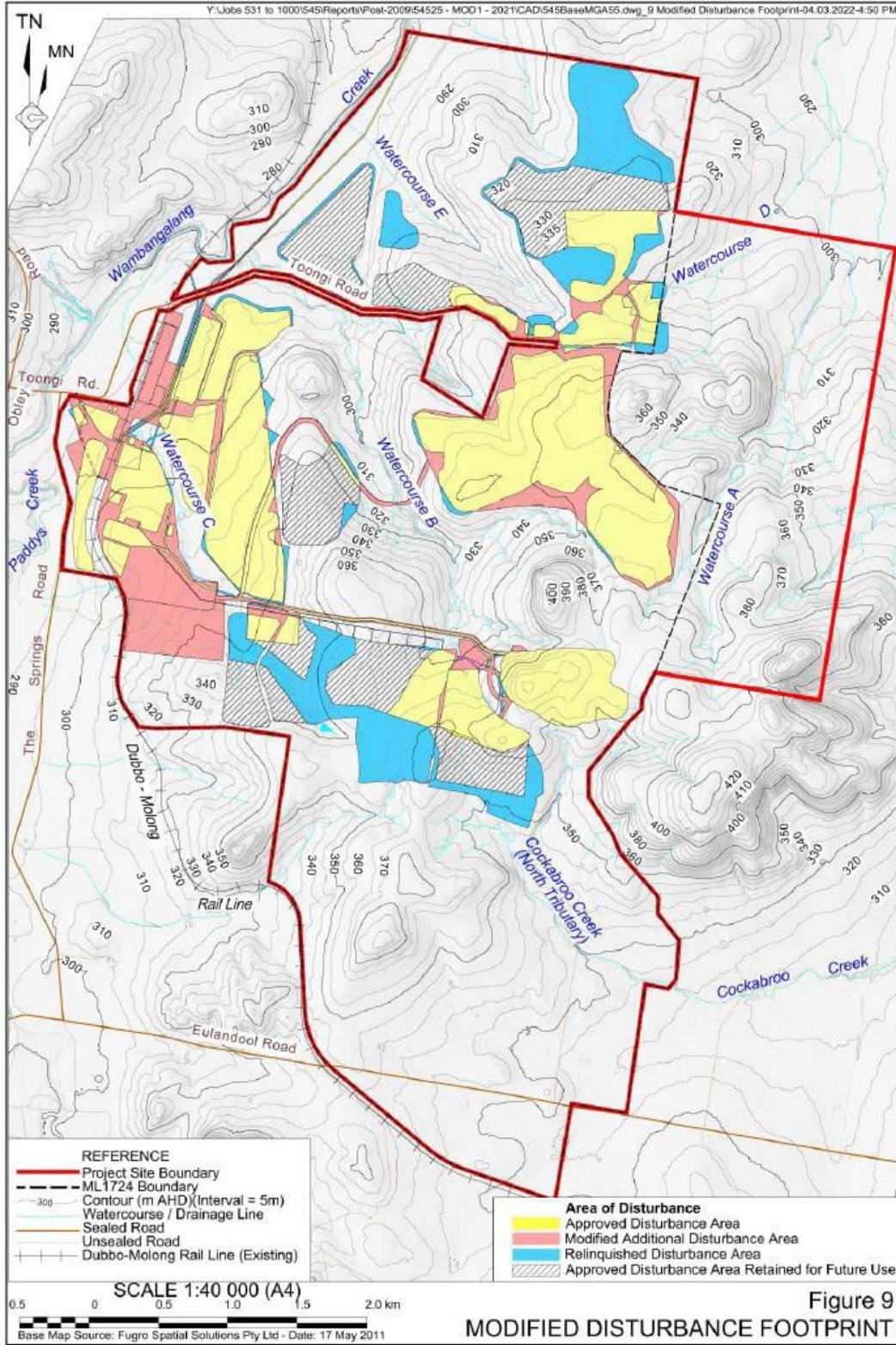


Figure 5: Dubbo Project – Environmental Monitoring Locations

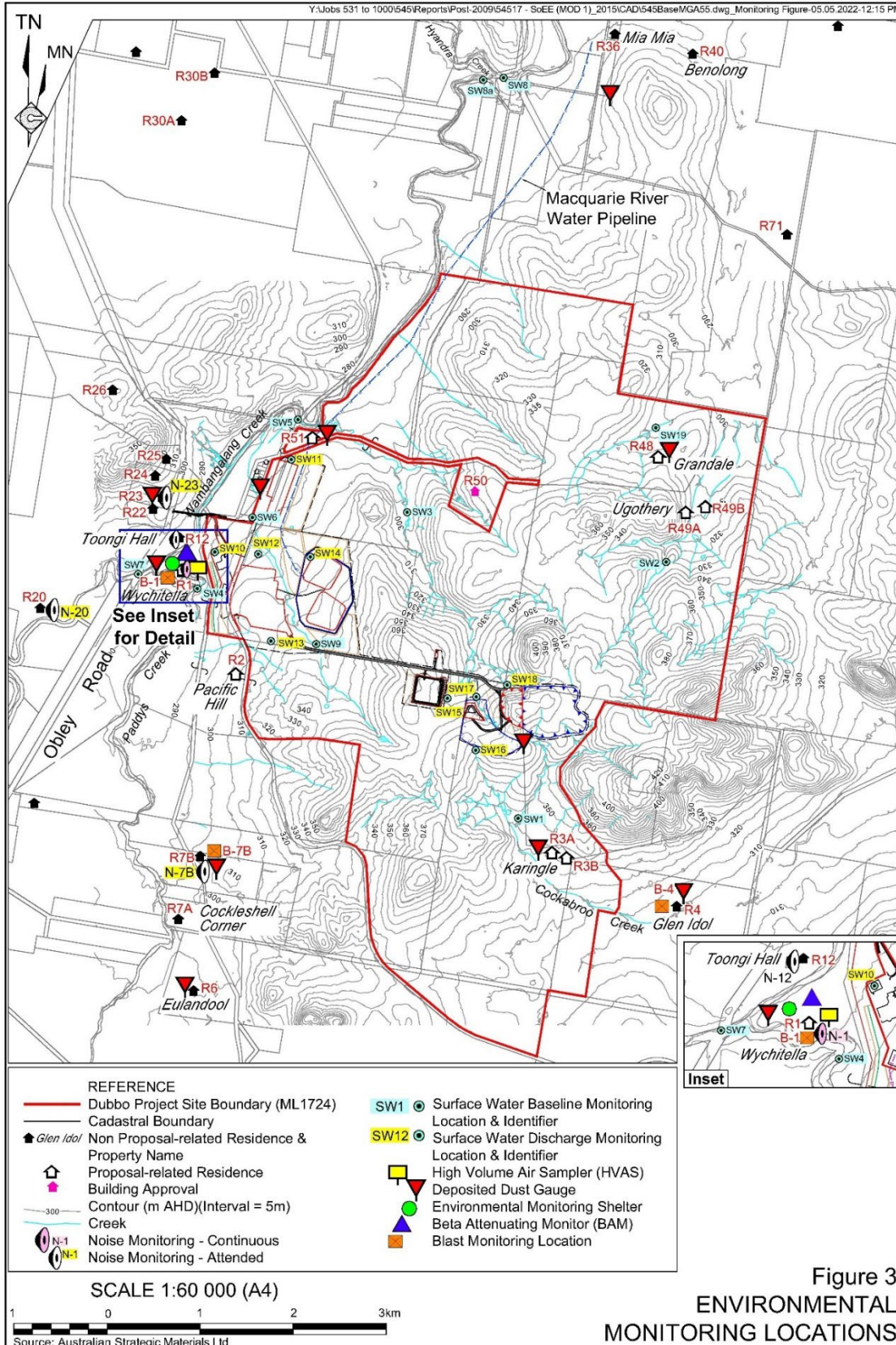
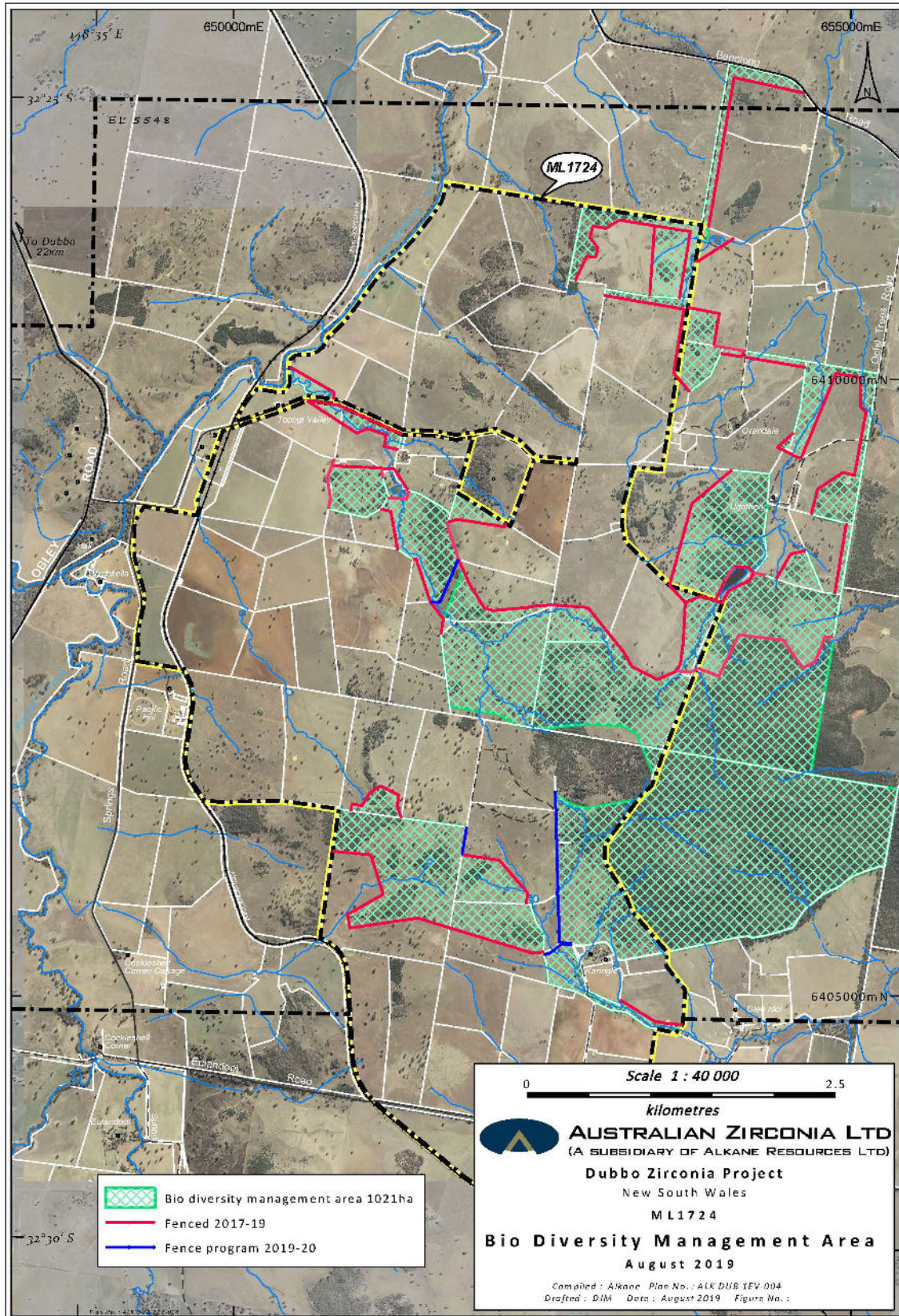


Figure 6: Biodiversity Management Area



3 Approvals

The Dubbo Project operates under the environmental consents, leases and licenses specified in Table 5.

Table 5: Consents, leases and licenses

Title	Legislation	Regulatory Authority	Approval Duration/ Expiry
State Significant Development approval 5251(28 May 2015)	Environmental Planning & Assessment (EP&A) Act 1979	NSW Planning and Environment (DPE)	31 December 2037
SSD-5251 – Modification 1 (2 Mar 2023)	Environmental Planning & Assessment (EP&A) Act 1979	NSW DPE	31 December 2045
EPBC 2012/6625 (24 Aug 2015)	EPBC Act 1999	Australian Government Dept of the Environment	31 December 2045
EPBC 2012/6625 Variation of Conditions attached to Approval (15 Mar 2022)	EPBC Act 1999	Australian Government- Dept of Agriculture, Water & Environment	31 December 2057
Mining Lease 1724 (18 Dec 2015)	Mining Act 1992	NSW Department Resources & Geoscience (DRG) now MEG	18 December 2035
Environment Protection License (EPL) 20702 (14 March 2016)	Protection of the Environment Operations (POEO) Act 1997	NSW Environment Protection Authority (EPA)	Ongoing until surrendered (14 March Anniversary)
Environment Protection License (EPL) 20702 Variation (15 Aug 2022)	Protection of the Environment Operations (POEO) Act 1997	NSW Environment Protection Authority (EPA)	Ongoing until surrendered (14 March Anniversary)
Water Access Licences WALs; 19994, 9191, 3396, 36409, 3412, 30259, 36790 and 36791	Water Management Act 2000	Water NSW	N/A
Water Supply Work Approval 80WA726382	s.95 Water Management Act 2000	Natural Resources Access Regulator	N/A
Conservation Property Vegetation Plan (31 May 2015)	Native Vegetation Act 2003	Local Land Services	In perpetuity

Title	Legislation	Regulatory Authority	Approval Duration/ Expiry
DA D2016-70 Karingle Quarry (13 July 2016)	Environmental Planning & Assessment (EP&A) Act 1979	Western Joint Regional Planning Panel	7 July 2021
DA D2016-70 Karingle Quarry Modification (25 August 2021)	Section 4.55 (1A) Environmental Planning & Assessment (EP&A) Act 1979	Dubbo Regional Council	N/A
General Terms of Approval Notice No. 1541379 (14 Jun 2016)	Section 91A (2) EP&A Act 1979	NSW Environment Protection Authority (EPA)	N/A
Occupation Certificate 2021-826 (26 May 2022)	Section 6.9, EP&A Act	Dubbo Regional Council	N/A

4 Operations Summary

4.1 Construction

No construction works were carried out on site during the period.

ASMH completed project commencement works (site entrance road and site office) by 27 May 2022. An Occupation Certificate was issued by Dubbo Regional Council on 26 May 2022.

An environmental monitoring shelter was installed on Wychitella and commissioned in March 2022. Meteorological data, PM2.5, PM10 and TSP baseline data is being collected prior to construction activity commencement.

In the five years since listing on the ASX, Australian Strategic Materials (ASM) has established a metals plant in South Korea, completed an optimisation study, progressed engineering and the finance needed for the construction of the Dubbo Project.



The “Air Quality Monitoring Station” located southeast of the nearest sensitive receptor (Toongi Hall).

4.2 Operations

All of the land enclosing the Dubbo Project was aquired by Australian Strategic Materials (Holdings) Ltd by June 2016, land was subsequently transferred to Toongi Pastoral Company in2025. Toongi Pastoral is under professional management. The General Manager is charged with the responsibility of operating a mixed farming operation (Toongi Pastoral Company Pty Ltd) on 3,715Ha of land containing the Mining Lease and project footprint.

Fencing and managing the 1,021Ha Biodiversity Offset Area also falls under the responsibility of the farming Manager. All land of the landscaped included in the offset were enclosed in the biodiversity offsets by 30 June 2019.

In March 2024 areas (outside of the approved disturbance) of the farm were registered with the Commonwealth regulator as a soil carbon project. Carbon baselines have been recorded through soil cores in the carbon estimation areas and a land management strategy has been implemented.

At a corporate level ASM has received letters of intent for >A\$1BN in conditional debt funding support for the Dubbo Project execution phase from multiple global Export Credit Agencies. A contract has been awarded to US-owned Bechtel for Front-End Engineering Design (FEED) services.

Commercial sales of alloys and metal ingots have commenced from the Korean Metals Plant.

Environmental monitoring points are shown in **Figure 5**.

Baseline water quality, air quality and meteorological data is collected by trained ASMH staff.

Ecological monitoring continues to be undertaken by qualified professionals.

A Community Consultative Committee with an independent Chairperson was established in late 2015 and has meets regularly and as deemed necessary by the committee.

4.3 Next reporting period

Management plans for the numerous Dubbo Project environmental aspects are continuing to be revised and updated to accommodate MOD1 changes and additional consent conditions.

Bectel to commence FEED contract.

ASM is continuing to target offtake agreements, equity partners and project finance to allow for a progression to construction.

Review environmental management plans specifically related to vegetation and PTWL Management following recommendations from AREA Environmental 2024 Report on PTWL and Vegetation Benchmarks.



Toongi farming paddocks post harvest - maintaining groundcover across all managed landscapes is key to success with many environmental outcomes including soil carbon sequestration, 25th November, 2024.

5 Actions Required from Previous Annual Review

This is the tenth Annual Environmental Management Review for the Dubbo Project.

Correspondence from DPE, EPA and DCCEEW is contained in Appendix C.

Table 6: Actions from review previous Annual Review

Notifications and Actions Required from previous Annual Review	Requested by	Action taken by Operator	Section where discussed
Letter dated 10/10/2025 – Upload Annual Review 2023-2024 to Company website	DPE	Ian Donabie	Appendix C

6 Environmental Performance

6.1 Air Quality

The Dubbo Project Air Quality Management Plan (AQMP) was prepared to describe dust control measures at Dubbo Project site and meet the requirements of Schedule 3, Condition 18 of SSD-5251.

The plan will be updated to include changes described in MOD1 EIS and additional consent condions in the next reporting period.

Management Plans can be found on the Dubbo Project web page at:

<https://asm-au.com/wp-content/uploads/2025/05/AirQualityManagementPlan-Stage1.pdf>

The Dubbo Project Air Quality Management Plan Air Quality criteria for the project are outlined in **Table 7 & 8**.

The February 2023 Modification 1 has resulted in the issue of a consolidated consent. The MOD1 consent removed the requirement to monitor deposited dust and TSP and added the requirment to monitor PM_{2.5}

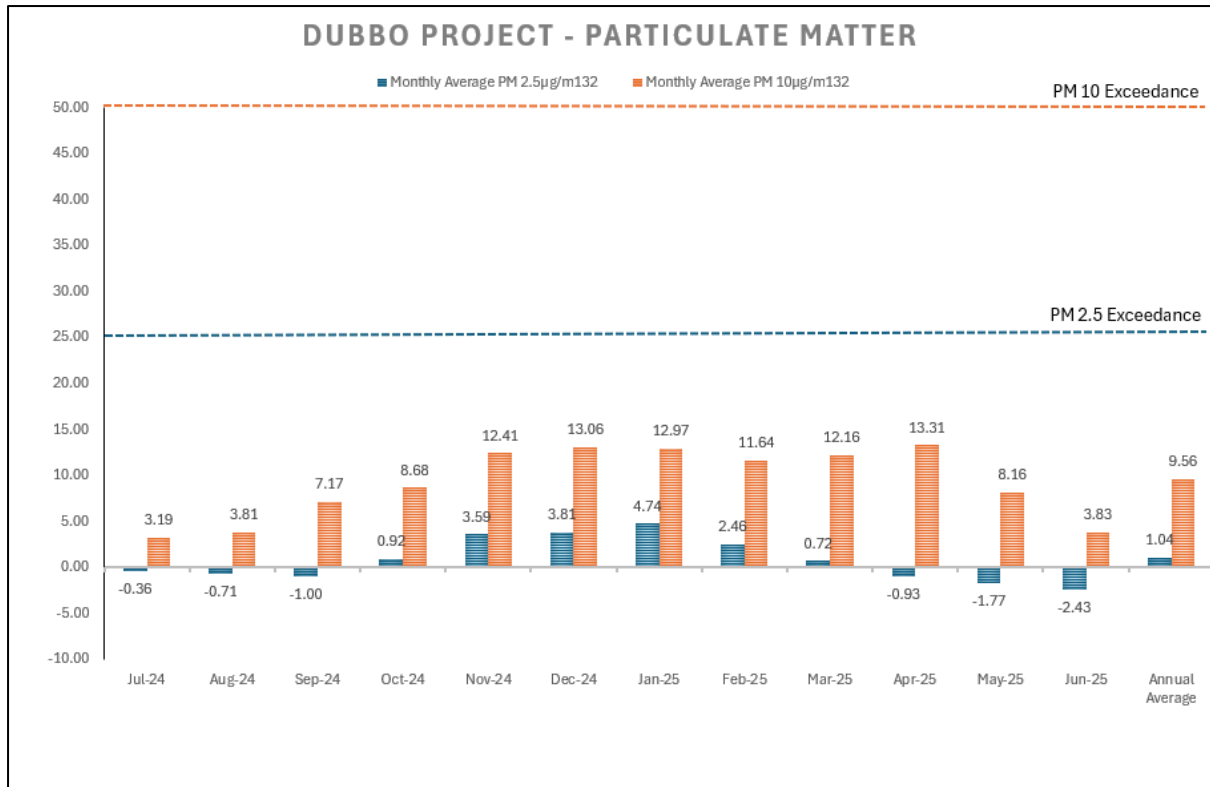
Table 7: Long term criteria for particulate matter

Pollutant	Averaging period	a, d Criterion
Particulate matter <10 µm (PM ₁₀)	Annual	25 µg/m ³
Particulate matter <2.5 µm (PM _{2.5})	Annual	8 µg/m ³

Table 8: Short term criteria for particulate matter

Pollutant	Averaging period	b, Criterion
Particulate matter <10 µm (PM ₁₀)	24 hours	50 µg/m ³
Particulate matter <2.5 µm (PM _{2.5})	24 hours	25 µg/m ³

Figure 7: PM 10 & 2.5 monthly averages at Wychitella monitoring shelter



Suspended particulates (PM 10 & 2.5 microns in size) were monitored continuously throughout the year reporting 352 of the 365 available days (these days recorded as data exceptions mainly due to instrument maintenance or failure). Long term PM 10 & 2.5 annual average was 9.09 micrograms/m³ and 0.76 micrograms/m³ respectively. Data is processed by ACOEM and monthly report provided to ASM.

The baseline monitoring has been solely influenced by seasonal and routine agricultural practices. There were no exceedance recorded during the reporting period however an event of high level PM10 was recorded in the baseline monitoring on the 27th of May 2025. Determined cause was the prevailing weather condition (west) towards the project site from local weather systems (see Appendix D for more information). Dubbo dust (25km's north of the project site) monitoring gauges recorded a similar occurrence in a similar time frame.

No dust management measures were employed during this reporting period as project construction has not commenced.

It should be noted that Toongi Pastoral Company makes it a significant priority to manage ground cover and migration of soils through wind and other means of environmental degradation.

The next reporting period will include changes to the alert and real time data measurements on site, this service is being supplied by ACOEM.

6.1.1 Proposed Improvements

The next reporting period may require detailed air quality controls and a revised Air Quality Management Plan prepared to include the MOD1 changes if construction proceeds.

6.2 Biodiversity

ASMH settled on the last of the Dubbo Project property acquisitions in June 2016 which created the opportunity for a change in focus of land management to biodiversity enhancement in offset areas and building carbon in soils across the estate. This is a significant change in focus after 150 years of management for agricultural production.

ASMH acquired an additional 169Ha rural property, Wheeler's Block, which fronts the Obley Road in late 2020 as part of a prior commercial arrangement.

Biodiversity at the Dubbo Project is managed under the Biodiversity Management Plan (BMP), which was completed in accordance with Schedule 3, Condition 31-35 of SSD-5251.

A component of the BMP is the Biodiversity Offset Strategy, which delineates the 1,021Ha of biodiversity offset areas and management actions selected to protect and enhance remnant vegetation communities (see **Figure 4**). The Biodiversity Offset Area (BOA) is protected in perpetuity with the registration on land title of a Conservation Property Vegetation Plan (CPVP) under the *Native Vegetation Act 2003*.

The CPVP was signed by ASM Directors on 22 May 2017 and Central West Local Land Services on 31 May 2017. A variation to the CPVP was done in the reporting period (October 2022). The changes were made to enhance the management of the CPVP.

Changes included:

- Validation of the description of the land over which the plan applies
- Changes to the authorised activities and management actions of the units of native vegetation
- Increasing the area for management actions for conservation outcomes and the area to include a great proportion of PTWL habitat.

While ASM has already put in place most of the tools to comply with the Australian Government approval (EPBC 2012/6625) for the Dubbo Project, the *Proposed Action* of developing an open cut mine has not yet commenced.

A Conservation Bond will be lodged with DPE prior to commencement of any development. The Department will be advised in writing at least three months prior to construction commencing.

In addition to the consent conditions in 2023 TPC secured Commonwealth funds to assist with fencing gullies on Wheelers Block and Grandale and fencing along Wambangalang Creek (Grey Box Woodland Program and Northern Basin MDBA Program).

It should be noted that there was significant dieback of trees across the whole project site from 2017 to January 2020. Black and White Cypress pine, Drooping She-oak and even red stringybark have died due to severe drought. With that dieback more sunlight is reaching the ground which has enabled growth of grasses, forbs, trees and shrubs. It has been decades since a recruitment window has occurred at Toongi. Thick stands of pine trees in 2021 and 2022 now support groundcover up to 100cm high where in a normal season there would be very low and sparse cover.

6.2.1 Management Measures

Biodiversity management actions for the Dubbo Project are focussed towards protection and enhancement of habitat for the State and Commonwealth listed Pink-tailed Worm-lizard (PTWL) (*Aprasia parapulchella*).

ASMH has prepared a PTWL Management Plan (Version 2.3) and a PTWL Biodiversity Offset Management Plan, both of which are appendices in the Biodiversity Management Plan (V2.0) which was approved by DPE on 8 February 2017 (see ASM website).

Dubbo Project biodiversity monitoring is reported annually and is based on ecosystem diversity habitat value measurements adapted from the Biometric methodology. ASMH employees record opportunistic sightings of various species of plants and animals.

Four vegetation community benchmarks and one control site were established around and neighbouring the project site in May 2016 using the now superseded Biobanking Assessment Method. From 2021 monitoring switched to the current assessment framework of the Biodiversity Assessment Method (BAM 2020).

The community benchmarks were surveyed on 23rd July 2024 by AREA Environmental & Heritage Consultants. In summary all sites had increases overall in benchmark scores in the 25-75% range and >75% range, indicating an improvement across all plots. In review the vegetation benchmarks survey has been moved to a Spring date.



Cool burning fire in native grass to promote regeneration of perennial diversity. 20th March 2025.



Natural regeneration in the Biodiversity Offsets, 6th March 2025.

Remnant vegetation monitoring sites are recovering at varying rates, depending on grazing and cultivation history.

Foxes and cats have been the focus of pest control programs during this period.

710 Kangaroo were harvested from the site by professional kangaroo operators. 42 feral pigs were removed (trapped and euthanised) from TPC land during the period.

There was a site visit on 29 June 2022 by DPE compliance officers. The purpose of the visit was to verify that proposed environmental actions listed in the 2021 Annual Review were being carried out.



Eastern Blue-tongue Lizard (Tiliqua scincoides) sunning himself on a cool November morning, 25th November 2024.



Eastern Bearded Dragon (Pogona barbata), 3rd September 2024.

6.2.2 Proposed Improvements

During the next reporting period;

- TPC will maintain fences around the biodiversity offset areas,
- Livestock will be managed in accordance with Offset Management Plan to allow for natural regeneration,
- Introduced vertebrate pest (pig, fox, cat and rabbit) control will continue,
- Eastern Grey Kangaroo (*Macropus giganteus*) will be culled under licence to reduce grazing pressure in the BOAs and across agricultural land,

- Signage in strategic areas will be installed to restrict access to BOAs to authorised personnel only, and
- Vegetation plots will be monitored to assess progress toward

6.3 Heritage

A Heritage Management Plan (HMP), which outlines measures to manage Aboriginal and Non-Aboriginal heritage sites at Dubbo Project was approved by DPE on 8 February 2017.

The site manager has use of a database to ensure that heritage sites outside of the project footprint and BOAs are not further disturbed by routine agricultural activities.

Additional sites outside the impact footprint have been identified and added to the heritage database. A full review will be conducted prior to construction.

With all existing or relocated sites adequately maintained, no active cultural heritage management occurred during the reporting period.

Ongoing engagement with local members and elders of the Wiradjuri Nation is continuing to show the importance of the cultural and heritage of the project site.

6.3.1 Management Measures

Management of the existing sites consisted of the Farm Manager and Stationhand familiarising themselves with the sites across the land controlled by Toongi Pastoral Company, and when required, inducting site visitors that are likely to be working in culturally sensitive areas of the property.

6.3.2 Proposed Improvements

Registered Aboriginal Parties will be invited to review heritage sites across the project at an agreed frequency once construction commences. Cultural heritage inductions will be a requirement prior to construction by contractors and visitors who will be working in the field around the site. A local cultural awareness trainer has been engaged by ASM.

Toongi Pastoral Company and the Macquarie Agricultural Pathways Program (MAPP) with Macquarie Anglican Grammar School is continuing with the fourth cohort of students working and learning onsite. 023. Students are provided with a cultural heritage induction as part of their immersion in general farm activities. Activities on the farm are linked to the school curriculum.



Macquarie Agricultural Pathways Program cohorts 3&4 graduation day from the NSW RFS Cadet Program led by Toongi Pastoral Staff.

6.4 Meteorological Monitoring

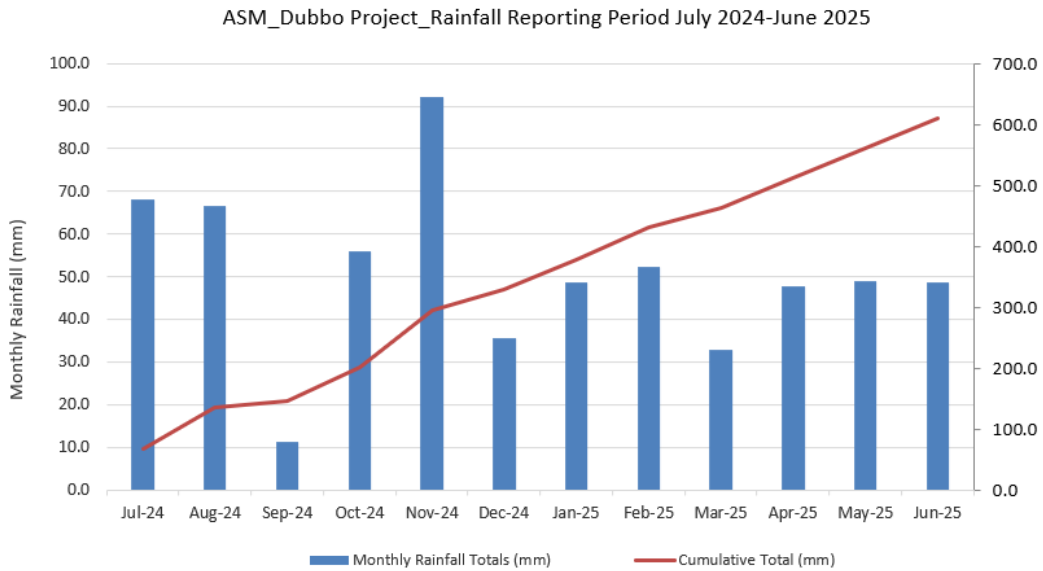
In March 2022 an Air Quality Monitoring Station was commissioned close to the project site. The location of the monitoring equipment was chosen after the local community objected to the shelter being placed at the closest sensitive receptor (210m NNW) – Toongi Hall. The monitoring shelter geographical coordinates are -32.450861 and 148.5838318"E at 284.2m above sea level.



Monitoring shelter location marked by red pin. Toongi Hall across the creek at 110'clock and project site the Springs Road.

Rainfall for the period (measured at AQMS Wychitella) is contained in **Appendix B**. A total 609.2mm of rain fell over 79 events in the reporting period (578.4mm over 83 days in the previous 12 months) and this represents a slightly below average rainfall event. The reporting period was very typically of the remainder of the region and a good representation of district conditions.

Figure 9: Monthly and cumulative rainfall on project site to 30 June 2025.



6.4.1 Proposed Improvements

The next reporting period will include changes to the alert and real time data measurements on site, this service is being supplied by ACOEM.

7 Water Management

The Dubbo Project Water Management Plan (Version 2.1 dated 16 Oct 2016) was approved by DPE on 12 October 2016. The WMP will be revised to take into account project optimisation and MOD 1 changes.

During the reporting period *Water Performance Measures* were included in the Dubbo Project's project approval, Condition 29 of Schedule 3 of SSD- requires ASMH to comply with these measures. Table 10 presents these *Water Performance Measures* and where each measure is addressed in this Water Management section.

As no construction has commenced, no performance measures have been installed/actioned.

Table 9: Water management performance measures

Feature	Performance Measure
Water Management – General	<p>Minimise the use of clean water on site.</p> <p>Minimise the need for make-up water from external supplies.</p>
Construction and operation of infrastructure	<p>Design, install and maintain all infrastructure within 40 m of watercourses to:</p> <ul style="list-style-type: none"> minimise the impact on watercourse water quality, hydrology and function; minimise the impact on the habitat of aquatic species, populations or communities, consistent with the <i>Guidelines for fish habitat conservation and management – Chapter 4</i> (DPI 2013), or its latest version; ensure pipelines across perennial watercourses are installed by directional drilling (under-boring) or attached to rail or road bridge crossings; and be in accordance with DPE Water's <i>Guidelines for Controlled Activities on Waterfront Land</i> (2012), or the latest version(s).
Macquarie River Pumping Station	<p>Design, construct and operate the water intake structure to prevent to the greatest extent practicable the entrapment and/or extraction of aquatic fauna species including juvenile fish and larvae.</p>
Mine Water Management System - General	<p>Design, install and/or maintain mine water storage infrastructure to prevent the discharge of mine water off-site (this does not apply to sediment control structures that can be designed to discharge in accordance with an EPL).</p> <p>On-site storages are suitably designed, installed and/or maintained to minimise permeability.</p> <p>Maintain adequate freeboard at all times to minimise the risk of discharge to surface waters.</p>
Waste Residue Storage Facilities and Salt Encapsulation Cells	<p>Nil discharge from site.</p> <p>Design, construct and maintain:</p> <ul style="list-style-type: none"> in accordance with the recommendations of the NSW Dam Safety Committee; to be stable over the long term and under all expected loading conditions;

	<p>in accordance with the standards set out in the Environmental Guidelines – Management of Tailings Storage Facilities (VIC DPI, 2006); and</p> <p>to be lined with HDPE liners or equivalent that complies with a minimum permeability standard of $< 1 \times 10^{-9}$ m/s in accordance with the <i>NSW Environmental Guidelines for Solid Waste Landfills</i> (EPA, 1996), unless otherwise agreed with the EPA; and</p> <p>to ensure the Solid Residue Storage Facility and Salt Encapsulation Cells are double-lined and include an adequate leak detection system.</p> <p>Ensure that at all times a freeboard of at least 600 mm (or 1000 mm for liquid residue storage facility) or a freeboard capable of accommodating a 1 in 100-year ARI, 72-hour rainfall event (or 1 in 10,000 year for the liquid residue storage facility) without overtopping, whichever is greater.</p>
Waste Rock Emplacement	<p>Design, install and maintain the emplacement to encapsulate and prevent:</p> <p>migration of potentially acid forming material, and saline and sodic material; and/or</p> <p>manage long term saline groundwater seepage.</p>
Clean water diversion & storage infrastructure	<p>*Design, install and maintain the clean water diversion system to capture and convey the 100-year ARI flood around the perimeter of the site.</p> <p>Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site.</p>
Flood mitigation measures	<p>Design, install and maintain flood mitigation measures ensuring that the Ore Processing Facility, Administration areas, Waste Residue Storage Facilities, Salt Encapsulation Cells and Waste Rock Emplacement are appropriately protected from flooding up to the 1 in 100 ARI.</p> <p>Residual impacts downstream must be managed in an appropriate manner.</p>
Sediment control structures	<p>Design, install and maintain erosion and sediment controls generally in accordance with <i>Managing Urban Stormwater: Soils and Construction – Volume 1</i> and <i>Volume 2E Mines and Quarries</i>.</p>
Chemical and hydrocarbon storage	<p>Chemical and hydrocarbon products to be stored in covered, impervious bunded areas in accordance with the relevant Australian Standards.</p>
Aquatic and riparian ecosystem	<p>Maintain or improve baseline channel stability.</p> <p>Develop site-specific in-stream water quality objectives in accordance with ANZECC 2000 and <i>Using the ANZECC Guidelines and Water Quality Objectives in NSW</i> procedures (DECC 2006), or its latest version</p>

Note *: a diversion system around the project site is not possible nor feasible but clean and dirty water systems will be kept separate through engineering design.

7.1 Water Supply

The principal source of water for the Dubbo Project is the Macquarie River which is seven kilometres north of the processing plant. A pump station within an easement on Mia Mia will supply water via a buried pipeline to the plant.

A combination of High and General security Macquarie River water licences will provide the Dubbo Project with processing water. This river water can be supplemented with temporary water (through seasonal purchase) and also with bore water from a licenced bore established on “Sweet Water” 600m northeast of the pump station.

The production bore was established on Sweet Water in October 2016 and was pump tested for seven days in February 2017. A Works Approval has been obtained from Water NSW for 1,250ML/annum. Water will ultimately be pumped to the river pump water supply line and joined.

Maximum Harvestable Rights Dams Capacity (MHRDC) is the volume of water landholders are entitled to capture and use without need for licencing. The maximum capacity of rainfall/runoff captured on ASMH-owned land is 223ML/yr.

Sediment or pollution control structures are exempt from the MHRDC consideration, unless the water captured is to be re-used on the site/property for non-environmental purposes.

An onsite water treatment plant will be used to produce potable water, eliminating the requirement to import potable water.

Table 10: Water Supply

Water Licences	Water sharing plan, source and management zone (as applicable)	Entitlement (ML)	Active pumping
WALs:19994, 9191, 3396, 36409, 3412	High Security Macquarie/Cudgegong	856	0
WAL30259	General Security Macquarie/Cudgegong	750	0
N/A	NSW Murray Darling Basin Fractured Rock <i>Aquifer</i>	Stock & domestic	Stock & domestic
N/A	Onsite dams, under harvestable rights	223	Stock & domestic
WAL 37691	Upper Macquarie Alluvial Groundwater Source	1402	Nil

7.2 Water Balance

The water balance indicates that the Dubbo Project will be dependent on a combination of river and bore water and water recycling within the processing plant.

The project is designed for zero discharge of 'dirty water' which will be kept separate from existing 'clean' water discharges from the ephemeral drainage lines that drain the Toongi Pastoral Company property.

7.3 Clean Water Management (Surface)

For reporting purposes, clean water management is divided into:

- onsite management.
- Wambangalang and Cockabroo Creeks; and
- offsite discharge.

7.3.1 Site Water

Clean water consists of through-flow from drainage of the undisturbed Dowd's Hill and water from onsite non-mine disturbed catchments. This water is diverted away from contamination sources (mine disturbance and infrastructure) and directed offsite. Management includes the construction of drains and bunds to collect and divert surface water flow past, or away from, mining disturbed catchments.

7.3.2 Surface Water Monitoring results

No surface water sampling was undertaken during the reporting period. Consequently there are no additions to the baseline data collected over the past 14 years. It is expected that all of the data collected to date will enable water quality trigger values for the project to be established in consultation with the EPA.

No flooding events occurred during the reporting period.

Discharge

No licenced discharges occurred during the reporting period.

7.4 Mine Water Management

N/A - project construction has not commenced.

7.5 Erosion and Sediment Control

N/A – project construction has not commenced.

7.6 Groundwater

By way of background information, sampling and pump testing of the stock and domestic bores around and neighbouring the project site occurred in June 2016. These bores have been established for many years to supply stock and domestic water to several properties.

All Dubbo Project groundwater bores (mostly in the fractured rock aquifers of the Lachlan Fold Belt) provide less than 2L/sec of variable quality water.

Springs in the Springs Offset and Mine South Offset re-commenced flowing in Winter 2020 after two years of zero flow. Springs stopped flowing in early 2023 as the season dried off considerably.

Table 11: Stock and domestic bore depth and yield

Sample Reference	Bore Name	Location	Total Depth	L/sec	LPM	SWL
GW-001	Ugothery	Shed	67.24	0.37	21.9	11.05
GW-002	Grandale	West Bore	28.31	0.30	18.1	13.24
GW-003	Toongi Valley 2	Shearing Shed	36.96	0.91	54.6	8.95
GW-004	Wychitella	House	47.33	1.53	91.8	5.4
GW-005	Pacific Hill 1	Shed	48.55	1.40	84.1	18.52
GW-006	Karingle 2	Lane West of House	38.98	1.41	84.6	13.3
GW-007	Toongi Valley 3	Spring	12.86	1.64	98.3	2.61
GW-008	Karingle 1	House	39.66	1.32	79	16.29
GW-009	Toongi Village	Well	15.4	1.43	85.6	7.32

Seven geotech bores/piezometres (installed September 2014) were most recently dipped for water levels on 2nd September 2024. Small variations in the ground water exist however have been stable the past 27 months. Three of seven piezos remain dry.

Table 12: Geotech bores in the Dubbo Project footprint

Bore	Piezo Depth	Wet /Dry	Depth to SWL (m) Aug 2019	Depth to SWL (m) Jul 2020	Depth to SWL (m) Aug 2021	Depth to SWL (m) Jul 2022	Depth to SWL (m) Aug 2023	Depth to SWL (m) Aug 2024	Reference Point (m above ground level)
C	13.06	Dry	Dry	Dry	Mud	Dry	Dry	Dry	N/A
S	15.72	Wet	14.42	14.8	13.28	5.63	7.38	9.98	0.75
W	15.27	Wet	Mud	Dry	Mud	15.23	15.26	15.23	0.7
E	14.95	Wet	Dry	Dry	Mud	Dry	Dry	Dry	0.9
Q	15.66	Wet	12.34	12.8	12.58	12.22	11.0	11.9	0.85
I	16.3	Dry	Dry	Dry	Dry	Dry	Dry	Dry	N/A
Y	11.6	Wet	9.8	9.7	8.97	7.3	7.53	7.63	0.9

7.7 Proposed Water Management Improvements

No improvements are proposed to groundwater management at the Dubbo Project in the next reporting period.

8 Rehabilitation

The Dubbo Project has not yet commenced construction.

8.1 Rehabilitation During Reporting Period

Minor rehabilitation activity (tree planting) along watercourse B in Banker Silo Offset of Fuzzy Box (*Eucalyptus conica*) took place in August 2021. The seedlings have grown at an exceptional rate.

8.2 Post Rehabilitation Land Use

Post-rehabilitation land use objectives and targets were contained in the draft 2015-2017 MOP.

However, a Rehabilitation Management Plan (RMP) and Forward Program will be submitted to the Resources Regulator at the appropriate time. ASM has reviewed, assessed and consulted with government agencies on agreed rehabilitation objectives and rehabilitation completion criteria as required by clauses 13 and 15 in Schedule 8A of the Mining Regulation 2016. ASM was granted an extension to 31 December 2026 for the submission of the RMP and supporting plans.

The objectives in Table 15 will be revised. Some of the targets have already been achieved.

Table 13: Rehabilitation and BOS Objectives and Targets

Category	Objective		Target(s)
	Rehabilitation	BOA	
Ecosystem Development (Final Land Use)	Protect, enhance and extend areas of remnant native vegetation.		Secure the BOA under PVP or equivalent mechanism.
	Maintain habitats on the final landform which encourage colonisation by native flora and fauna with specific niche requirements.		Species diversity and density of rehabilitated landforms equivalent to analogue sites established within the BOA.
	Extend, improve, protect and link areas of remnant native vegetation.		Secure the BOA under PVP or equivalent mechanism. Prepare and implement a Biodiversity Management Plan (BMP).
	Retain areas on the Dubbo Project Site amenable to future agricultural or industrial activities.	-	Agricultural productivity of land equivalent to pre-mining landforms.

Post-Mining Land Use	Maximise positive and minimise adverse socio-economic outcomes following mine closure.	-	Consult with the community and government agencies in relation to the post-mining land use. Rehabilitate the Mine in accordance with Plan 4 , unless otherwise agreed.
	Provide rehabilitated woodland communities which adjoin the established Biodiversity Offset Area to maximise the wildlife corridors created within the local setting.	Undertake habitat augmentation to improve and promote corridors for fauna movement linking adjacent remnant woodland vegetation with the rehabilitation of the Mine.	Establish woodland vegetation over the landform equivalent to local analogues of that community. Visual identification of wildlife corridors within the largely agricultural setting. Conserve under a Conservation PVP 1021ha of remnant native vegetation in accordance with a Biodiversity Offset Strategy.
	Integrate areas of biodiversity enhancement and conservation with agriculture.		Undertake agricultural activities on the Mine Site, including within the BOA in accordance with a PVP and BMP.
Other	Allow for the relinquishment of the Mining Lease and the return of the security lodged over the Mining Lease within a reasonable time after the end of the mine life.		50% within 5 years of final rehabilitation. 100% within 10 years of final rehabilitation.

8.3 Trials, Monitoring and Research

No trials nor monitoring of rehabilitation was undertaken during this period. During the 2017 reporting period, four benchmark vegetation communities' benchmarks were identified and described by OzArk as a goal against which to measure rehabilitation success.

In conjunction with NSW DPI two woody biomass trial sites have been established on TPC-owned land adjacent to the project site. This research is aimed at identifying the species of trees that are the most productive in generating biomass in the Toongi environment. Trangie Agricultural Research Station is a

Biomass power generation is a potential source of renewable energy to supply some of the Dubbo Project's green energy requirements.



Ripping establishment lines for the Woody Biomass trail at "Ugothery", 13th March 2025.

8.4 Key Rehabilitation Risks

Should construction commence the key rehabilitation risk in the next reporting period will be weather related. Stripping and handling topsoil resources should ideally be performed when soils are neither too wet nor too dry.

8.5 Actions for Next Reporting Period

Topsoil stripping and stockpiling will take place during the next reporting period should construction commence, however this is not currently expected to be the case. Trials will examine productive pasture establishment techniques on the soil stockpiles. It is intended to establish productive perennial pastures on the soil stockpiles and include those stockpiles as a resource to be opportunely grazed by livestock. The soil stockpiles will be managed for their long term soil health to ensure they are a suitable medium for rehabilitation in 20+ years time.

9 Community

9.1 Consultation

The key channel to ensuring an effective passage of information between ASMH and the surrounding community, is the Community Consultative Committee (CCC). The CCC is an independently chaired member committee representing the Dubbo Project, the local community (including environmental interests) and the Aboriginal community.

At CCC meetings, typically held quarterly or as necessary, members are updated by ASMH personnel on the progress of current and proposed mining operations and projects. Community representatives are given the opportunity to raise concerns regarding the project and to offer advice regarding consultation with the community. CCC meeting minutes are available via the ASM website (<https://asm-au.com/mines/the-dubbo-project/community/>).

The CCC met twice during the reporting period, these meetings were held on 31st October 2024 and 16th April 2025. Minutes have been posted to the above website.

Dubbo Project Community Updates (newsletter) were published in October 2024, December 2024 and May 2025.

In addition to the CCC, ASM utilised a number of methods of communication/consultation with the community during the reporting period, including:

- ASX announcements (publicly available) and emailed or posted to subscribers.
- Relevant information regarding mine approvals, operations and environmental monitoring results available to the public on the ASM website.
- Attending vocational and tertiary information days at schools.
- Three-day presence at Dubbo Show.
- Ongoing informal consultation with community, project neighbours.
- Providing a 24-hour community information line.
- Responding in person to phone and email enquiries.
- Sending issue-specific letters to members of the public in response to queries regarding the project development.

These methods of community consultation will continue during the next reporting period as well as targeted consultation for Management Plan updates and the RMP post-MOD1 approval.

9.2 Support

Over the life of the development, ASMH has committed to a Voluntary Planning Agreement with Dubbo Regional Council to contribute:

- \$300,000 annually to the maintenance of Obley/Toongi Road.
- \$42,000 annual Road Contributions (to and from work).
- \$42,000 annual Road Contributions (other direct vehicle trips for employees) and
- \$230,000 for Boundary Road (Keswick Parkway South to Sheraton Road).

CPI adjustment to apply after year one. VPA contributions to commence on 1 January or 1 July following commencement of Obley/Toongi Road upgrade.

9.3 Complaints and Enquiries

ASMH manages complaints in accordance with the protocols and procedures contained in the EMS. During the reporting period no complaints were received.

ASMH staff will respond to all complainants and conduct investigations into specific concerns. Investigation outcomes consisting of corrective action, where required, and follow-up communication with the complainant will be actioned.

A register of complaints and enquiries received from the community is maintained by ASMH. A modified version of this register (excluding personal details of complainants) is published on the ASM website.

<https://asm-au.com/mines/the-dubbo-project/esg/>

10 Independent Environmental Audit

As per Schedule 5 conditions 9 and 10 of the consent conditions:

1. Within one year of commencing development under this consent, 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 prepared in accordance with the *Independent Audit Post Approval Requirements (2020 or as updated)* and
 - (b) be submitted, to the satisfaction of the Secretary, within two months of undertaking the independent audit site inspection, unless otherwise agreed by the Secretary
 - (c) review and respond to each independent Audit Report prepared under the Schedule 5 Condition 9 of the consent
 - (d) submit a response to the Secretary and any other NSW Agency that requests it, together with a timetable for the implementation of the recommendations of the Independent Audit Report
 - (e) implement the recommendations to the satisfaction of the Secretary and
 - (f) make each Independent Audit Report and response to it publicly available no later than 60 days after submission to the Secretary.

As construction has not yet commenced, this condition has not yet been triggered.

11 Incidents and Non-Compliances During Reporting Period

This section provides further detail on the incidents and non-compliances reported in Section 1 as well as any other official regulatory interaction that occurred during the reporting period.

11.1 Official Regulatory Interaction

No reportable incidents or warning letters, penalty notices or prosecution proceedings by any NSW Government regulatory agency were received during the reporting period.

Correspondence from DPE is contained in **Appendix C**.

12 Activities to be Completed in Next Reporting Period

Environmental activities and initiatives to be implemented in the next reporting period, should construction commence (ASMH does not anticipate that this will be the case) will focus on reduction of offsite impacts such as noise and dust, management and monitoring of biodiversity offset areas, finalising the final landform plans, and commencing rehabilitation of soil stockpiles and erosion and sediment control structures. Details on these activities are shown in Table 16.

Table 14: Activities proposed for 2025-2026

Proposed Activities	Location	Proposed Completion Date
Fauna monitoring	ASMH site and offset areas	Ongoing
Control of noxious weeds	ASMH site and offset areas	Ongoing
Eastern Grey Kangaroo culling	TPC and BOA	Ongoing
Feral animal control	TPC and BOA	Ongoing
Fence maintenance in accordance with the Biodiversity Offset Management Plan and PVP	Offset areas	Ongoing
Pink-tailed Worm-lizard Survey	PTWL Offset areas	Spring 2025
Analogue vegetation plot monitoring	Obley Road Reserve, Toongi Hall and Project Site	Spring 2025
Continue weed management and rubbish removal	Biodiversity offset areas	Ongoing
Environmental monitoring as required by consent conditions and EPL	Site and linear infrastructure activity areas	TBC