


Table 1: Annual Review

Name of operation	Cabbage Tree Road Sand Quarry
Name of operator	Newcastle Sand
Development consent #	SSD-6125
Name of holder of development consent / project approval	Williamtown Sand Syndicate Pty Ltd
Mining lease #	Not applicable
Water licence #	Not applicable
RMP	Not applicable
Annual Review start date	1 January 2025
Annual Review end date	31 December 2025
<p>Newcastle Sand certify that this annual report is a true and accurate record of the compliance status of the Cabbage Tree Road Sand Quarry for the period 1 January 2025 to 31 December 2025.</p> <p><i>Note.</i></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	Darren Williams
Title of authorised reporting officer	Director
Signature of authorised reporting officer	
Date	31/03/2026
Version 1.0 31 March 2026	

1. STATEMENT OF COMPLIANCE

A statement of compliance is shown in **Table 1**, where non-compliances were identified against approvals these are outlined in **Table 2**. Status is based on the compliance status key shown in **Table 3**.

Table 2: Statement of Compliance

Where all conditions of the relevant approvals complied with?	
SSD_6125	No
EPL 21264	No

Table 3: Non-Compliances (Relevant to the 2025 Period)

Relevant Approval	Condition #	Condition Description	Compliance Status (see Table 4)	Comment	Addressed in Annual Review
SSD-6125	Schedule 3 Condition 37	BRMP Frog Monitoring	Non-Compliant (Low)	<p>Requirement: The BRMP requires two monitoring events per year following rainfall during the peak breeding season.</p> <p>Issue: Rainfall constraint. Monitoring is dependent on the presence of suitable breeding habitat (standing water), consistent with the species' ecological requirements. One monitoring event was undertaken in January 2025. Insufficient rainfall during Spring and Summer 2025 did not provide suitable conditions (i.e. pooling water) to enable a second survey within the reporting period.</p> <p>Further Action/Comment: Monitoring was undertaken in January 2026 and February 2026 following rainfall events. The BRMP is proposed to be updated to better reflect rainfall-triggered monitoring requirements in accordance with ecological best practice. an update to the BRMP will include improved performance and weather based rather than time-based monitoring, and on the ecologist's recommendation / best practice.</p>	Section 6.4.2 Section 11
SSD-6125	Schedule 3 Condition 47	Radiation Survey	Non-Compliant (Low)	<p>Issue: The site is required to prepare a radiation survey following vegetation clearing and prior to commencing any other ground disturbing activities. All surveys for each disturbed sector have been completed.</p> <p>Further Action/Comment: Radiation Surveys have been completed in all disturbed areas and have detected no elevations of radiation from 2016-2026. Modification 4 seeks to amend the timing of this condition to the radiation specialists recommendation. Request for Information provided by the DPHI and closed out / resolved. Reported in Annual Review.</p>	Section 11 Section 6.4.6
SSD-6125	Schedule 5 Condition 4	Management Plan Requirements Revision of Strategies, Plans & Programs	Administrative non-compliance	<p>Issue: Review and updating of management plans is ongoing, with not all plans requiring updating finalised within the reporting period.</p> <p>Further Action/Comment: In progress/staged update Some of the management plans are required for updating. The SWMP has been submitted, AQMP is underway in consultation with the Department. Modification 4 is also in assessment with the Department in which all management plans are to be updated as per Schedule 5 Condition 4(d).</p>	Section 11
SSD-6125 Statement of Commitments	SoC 8.3.12(b)	Access Road Sealing	Non-Compliant (Low)	<p>Issue: Ongoing from previous years.</p> <p>SoC requires sealing of the access road to the northern resource area. This has not been undertaken. The road is currently maintained in a stable condition and managed through operational controls to minimise dust generation and environmental impacts. No adverse impacts associated with the unsealed surface have been identified.</p> <p>Further Action / Comment: The requirement is under MOD 4 assessment to align with current operational practices.</p>	Section 11

Table 4: 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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).

2025 Annual Environmental Review

Cabbage Tree Road Sand Quarry Cabbage Tree Road, Williamtown NSW

WILLIAMTOWN SAND SYNDICATE PTY LTD

NEWCASTLE SAND

Quarry Manager

Elliott Laver

398 Cabbage Tree Road, Williamtown NSW 2318

elliott@newcastlesand.com.au

0402 648 079

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Document Control:

Version	Description	Date	Author
1.0	Initial Document	30 March 2026	Newcastle Sand and IEMA

Contents

1.	STATEMENT OF COMPLIANCE	II
2.	INTRODUCTION	XII
2.1	SCOPE	XII
2.2	PROJECT SUMMARY	16
2.3	ANNUAL REVIEW REPORTING REQUIREMENTS	19
3.	APPROVALS	21
3.1.1	NSW Development Consent	21
3.1.2	Commonwealth Approval	22
3.1.3	Environment Protection Licence	22
3.1.4	Further Permits and Licences	22
4.	OPERATIONS SUMMARY	24
4.1	PRODUCTION	24
4.1.1	EIS Predictions	24
4.1.2	Production Data	24
4.1.3	Employment Summary	25
4.2	CONTRIBUTIONS TO COUNCIL	25
4.3	EXTRACTION SUMMARY	26
4.4	FORECAST OPERATIONS FOR THE NEXT REPORTING PERIOD	26
4.5	HOURS OF OPERATION	27
5.	ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW	28
5.1	FEEDBACK ON 2024 ANNUAL REVIEW (DPHI)	28
5.2	ACTIONS FROM THE PREVIOUS ANNUAL REVIEW (NEWCASTLE SAND PROPOSED ACTIONS)	28
6.	ENVIRONMENTAL PERFORMANCE	29
6.1	NOISE	33
6.1.1	EIS Predictions	33
6.1.2	Approved Criteria	33
6.2	KEY ENVIRONMENTAL PERFORMANCE	33
6.2.2	Management Measures	36
6.2.3	Proposed Improvements	36
6.2.4	Noise Complaints	36

6.3	AIR QUALITY	37
6.3.1	EIS Predictions	37
6.3.1	Approved Air Quality Criteria	37
6.3.1	Key Environmental Performance	40
6.3.2	Air Quality Results	40
6.3.3	Air Quality Long Term Trends	46
6.3.1	Trigger Response Effectiveness	47
6.3.2	Air Quality Operating Performance	47
6.3.3	Management Measures	47
6.3.4	Proposed Improvements	48
6.3.5	Air Quality Complaints	48
6.3.6	Comparison to EIS predictions	48
6.4	BIODIVERSITY.....	49
6.4.1	EIS Predictions	49
6.4.2	Frog Monitoring	49
6.4.3	Fauna Exclusion Fencing	49
6.4.4	Fauna Incidents	50
6.4.5	Surveillance Cameras	50
6.4.6	Clearing Activities	51
6.4.7	Habitat Trees and Nest Box Monitoring	52
6.4.8	Pest Survey and Management	52
6.4.9	Weed Survey and Control	53
6.4.10	Proposed Improvements	53
6.5	OFFSETS	53
6.5.1	Management of Offsets	54
6.5.2	Offset Vegetation Clearing	55
6.6	BIODIVERSITY AND REHABILITATION BOND	55
6.7	TRAFFIC MONITORING.....	56
6.7.1	EIS Predictions	56
6.7.2	Approved Criteria	56
6.7.3	Key Environmental Performance	57
6.7.4	Management Measures	58
6.7.5	Proposed Improvements	58
6.8	HERITAGE MANAGEMENT	60
6.8.1	EIS Predictions	60
6.8.2	Key Environmental Performance	60
6.8.3	Management of Heritage	61
6.8.4	Proposed Improvements	61

6.9	WASTE MANAGEMENT AND MINIMISATION.....	61
6.10	ENERGY EFFICIENCY	62
	6.10.1 Diesel and Electricity Use	62
	6.10.2 Opportunities to Improve Energy Efficiency	63
7.	WATER MANAGEMENT _____	64
	7.1.1 EIS Predictions	64
	7.1.2 Approved Criteria	65
7.2	WATER USE	66
7.3	WATER MONITORING NETWORK.....	67
7.4	WATER LEVELS	69
7.5	WATER QUALITY AND DATA TRENDS	71
7.6	RAINFALL	72
7.7	TRIGGER VALUE EVALUATION	74
7.8	PFAS EXPOSURE REVIEW.....	76
7.9	KEY ENVIRONMENTAL PERFORMANCE	77
8.	REHABILITATION _____	78
8.1	EIS PREDICTIONS.....	78
8.2	KEY ENVIRONMENTAL PERFORMANCE	78
	8.2.1 Clearing and Rehabilitation Areas	79
	8.2.2 Rehabilitation Bond	80
8.3	MANAGEMENT OF REHABILITATION	80
9.	COMMUNITY _____	81
9.1	COMMUNITY OVERVIEW.....	81
9.2	COMMUNITY CONSULTATIVE COMMITTEE	81
9.3	NEWSLETTERS & OPEN DAYS.....	82
9.4	COMPLAINTS RECORDS.....	82
9.5	COMPLAINTS SUMMARY	83
10.	INDEPENDENT ENVIRONMENTAL AUDIT _____	84
11.	INCIDENTS, NON-COMPLIANCES DURING THE MONITORING PERIOD _____	86
12.	ACTIVITIES TO BE COMPLETED IN THE NEXT REPORTING PERIOD _____	90

Tables

Table 1:	Annual Review Title Block	i
Table 2:	Statement of Compliance	ii
Table 3:	Non-Compliances (Relevant to the 2025 Period).....	iii
Table 4:	Compliance Status Key for	iv
Table 5:	Key Aspects of the Currently Approved Cabbage Tree Road Sand Project	16
Table 6:	Annual review requirements from SSD-6125.....	19
Table 7:	Production Data in Tonnes	25
Table 8:	Employment and trucking data	25
Table 9:	Actions from the Previous Annual Review (Newcastle Sand)	28
Table 10:	Development Impact Prediction Evaluation Against EIS Summary	30
Table 11:	Noise Criteria (SSD-6125).....	33
Table 12:	Noise Monitoring Results for 2025 Monitoring Period	35
Table 13:	Air Quality Criteria	37
Table 14:	Long Term BAM Monitoring Results (2020-2025).....	46
Table 15:	Species Recorded 2025	51
Table 16:	Laden Truck Movement Criteria and Key Summary.....	57
Table 17:	Fuel and electricity usage for quarry	63
Table 18:	Water Use Summary 2019-2025 and Water Saving Investigations.....	67
Table 19:	Groundwater Level Evaluation Against TARP Values.....	71
Table 20:	Observation and Trend Summaries and Trigger Evaluation.....	75
Table 21:	Summary of Complaints 2019-2025	83
Table 22:	IEA Recommendations Summary.....	84
Table 23:	Summary of Non-Compliances and Environmental Exceedances During the Reporting Period	87

Figures

Figure 1: Location of the Cabbage Tree Road Sand Quarry	13
Figure 2: Resource and Sequencing Plan	14
Figure 3: Subject Land and Receptors	15
Figure 4: Air Quality Monitoring Network Locations	39
Figure 5: Air Quality HVAS Results of TSP & PM10 2025	41
Figure 6: Air Quality Hardes (RT2) 24 Hour Rolling Average Criteria Results 2025	44
Figure 7: Air Quality Sampson (RT1) 24 Hour Rolling Average Criteria Results 2025.....	45
Figure 8: Tally of Daily Laden Trucks	59
Figure 9: Water Monitoring Locations	68
Figure 10: Groundwater Level Monitoring Tarp Rules (Watershed HydroGeo, 2019)	70
Figure 11: Longterm Groundwater Elevation Levels (mAHD) results against Rainfall (mm).....	73

Appendices

- Appendix 1: Extraction Survey (Centurion Survey, 2025)
- Appendix 2: Noise Monitoring Reports 2025 (Spectrum, 2025)
- Appendix 3: Air Quality Monitoring Report (VGT, 2025)
- Appendix 4: Annual Amphibian Survey (Wedgetail, 2025)
- Appendix 5: Camera Monitoring 2025 (Wedgetail, 2025)
- Appendix 6: Pre-Clearing and Clearing Letters (Wedgetail, 2025)
- Appendix 7: Radiation Surveys (Bartolo, 2025)
- Appendix 8: Nest Box Monitoring (Wedgetail, 2025)
- Appendix 9: Annual Water Report 2025 (VGT, 2025)
- Appendix 10: Annual PFAS Exposure Pathways Review (Kleinfelder, 2025)
- Appendix 11: Rehabilitation Monitoring Report (Wedgetail, 2025)

2. INTRODUCTION

2.1 SCOPE

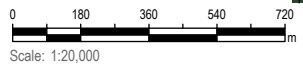
This Annual Review has been prepared in accordance with Schedule 5, Condition 11 of SSD-6125, and the NSW Annual Review Guideline for State Significant Mining Developments (2015) to evaluate the environmental performance of Cabbage Tree Road Sand Quarry. This AR has been prepared for reporting the calendar year from 1 January 2025 to 31 December 2025. The project operated in general accordance with the SSD-6125 and EPL 21264, noting a small number of low-risk and administrative non-compliances, which were appropriately managed and reported. Monitoring results indicate that the site remained consistent with baseline conditions, with no incidents causing material environmental harm occurred.

This Annual Review is submitted to the NSW Department of Housing and Infrastructure (DPHI) for review and made publicly available on Newcastle Sands website, when approved by DPHI for access by Hunter Water Corporation (HWC), Port Stephens Council (PSC), the Community Consultative Committee (CCC) and public. **Figure 1**, **Figure 2** and **Figure 3** outline the Project's location in a regional context, consent boundary, disturbance footprint, resource and sequence plan and surrounding receptors.



637000

- LEGEND**
- Site Boundary
 - Lot Boundary
 - Road
 - Watercourse
 - NPWS Reserves

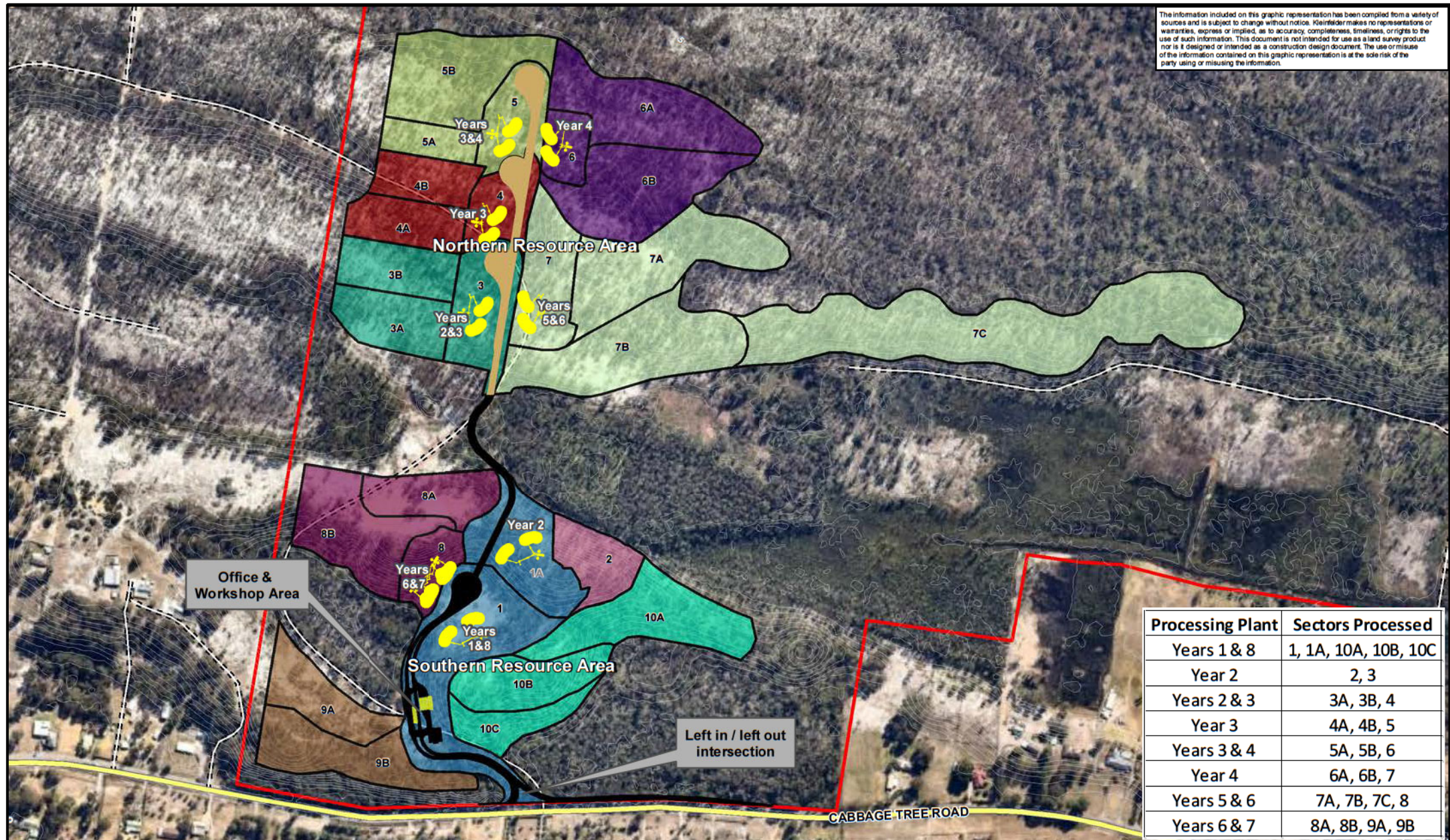


GDA2020 MGA Zone 56
20/03/2024

Newcastle Sand

Site Locality
FIGURE 1

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Processing Plant	Sectors Processed
Years 1 & 8	1, 1A, 10A, 10B, 10C
Year 2	2, 3
Years 2 & 3	3A, 3B, 4
Year 3	4A, 4B, 5
Years 3 & 4	5A, 5B, 6
Year 4	6A, 6B, 7
Years 5 & 6	7A, 7B, 7C, 8
Years 6 & 7	8A, 8B, 9A, 9B

Legend

- Subject Land
- Arterial Road
- Track
- Road - sealed
- Processing Plant & Infrastructure

Sector

	1
	2
	3
	4
	5
	6
	7
	8
	9
	10

Contours (1m)

Metres

0 25 50 100 150 200 250

N

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PROJECT REFERENCE: 20190803
 DATE DRAWN: 4/01/2019 14:12 Version 1
 DRAWN BY: gjoyce
 DATA SOURCE: NSW DFSI - 2017
 Nearmap - 2018

Quarry Operations Plan

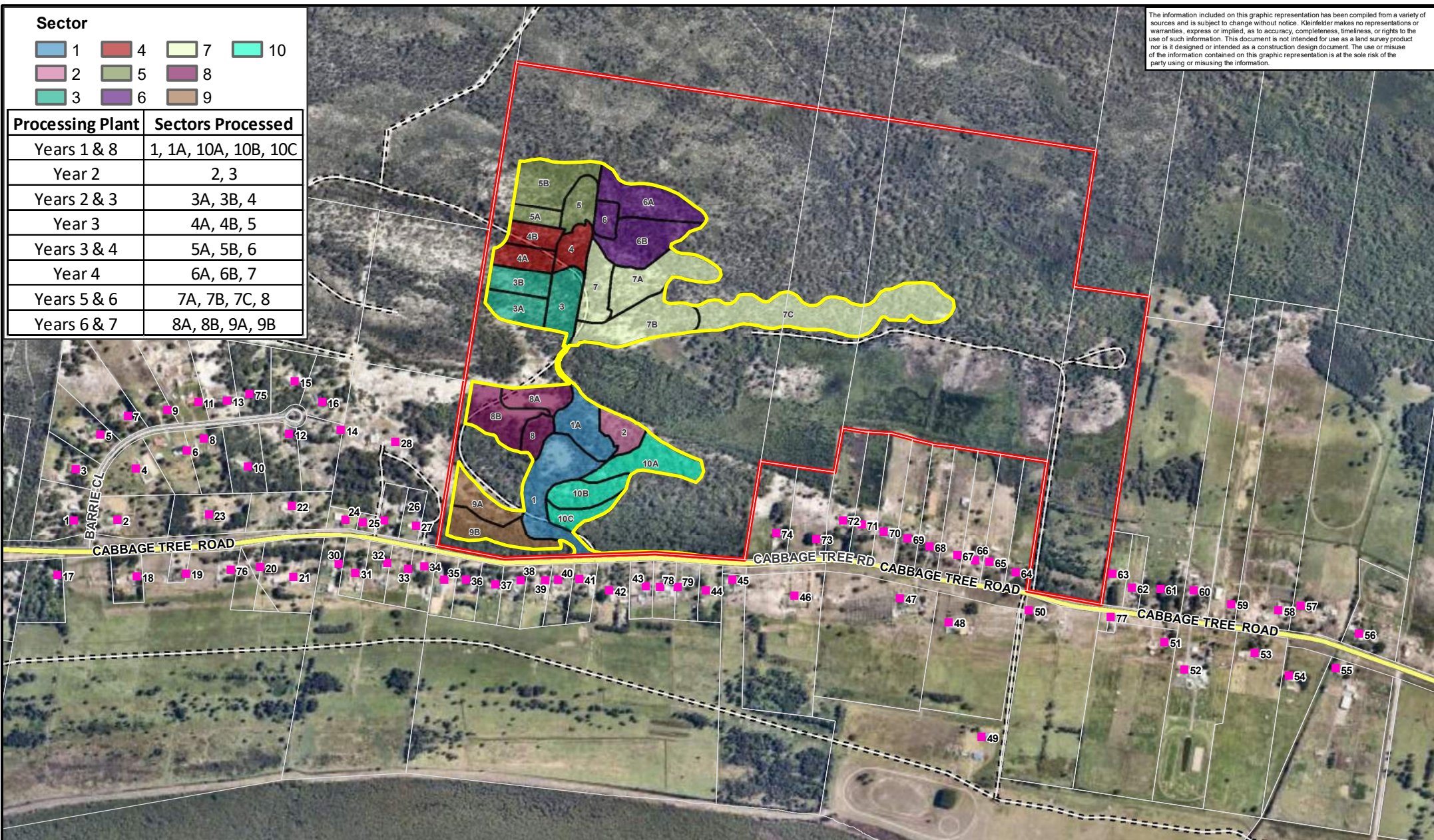
Cabbage Tree Road Sand Quarry
 Biodiversity and Rehabilitation Management Plan
 Cabbage Tree Road, Williamtown, NSW

FIGURE:
1

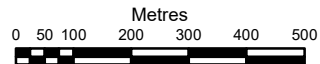
Sector			
1	4	7	10
2	5	8	
3	6	9	

Processing Plant	Sectors Processed
Years 1 & 8	1, 1A, 10A, 10B, 10C
Year 2	2, 3
Years 2 & 3	3A, 3B, 4
Year 3	4A, 4B, 5
Years 3 & 4	5A, 5B, 6
Year 4	6A, 6B, 7
Years 5 & 6	7A, 7B, 7C, 8
Years 6 & 7	8A, 8B, 9A, 9B

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Legend	
	Subject Land Boundary
	Project Area Boundary
	Arterial Road
	Local Road
	Track
	Receptor
	Lot Boundary



PROJECT REFERENCE: 20190803
 DATE DRAWN: 8/03/2019 13:59 Version 1
 DRAWN BY: BDeane
 DATA SOURCE: NSW DFSI - 2017
 Nearmap - 2018

Subject Land and Receptors

Cabbage Tree Road Sand Quarry
 Cabbage Tree Road, Williamtown, NSW

FIGURE:

2

2.2 PROJECT SUMMARY

The key conditions of the Project are shown in **Table 5** below and summarises the approved activities for Newcastle Sand operations and throughout the life of the Project.

Table 5: Key Aspects of the Currently Approved Cabbage Tree Road Sand Project

Aspect	Key Aspects of the Project
Key Elements	Sand quarry extracting up to 530,000 tonnes per annum over a period of 6 to 15 years including the construction of an intersection with Cabbage Tree Road, sealed and gravel access roads, site office, workshop and weighbridges. Progressive rehabilitation of quarried land returning to native vegetation communities with potential future use of the facilities area.
Location	398 Cabbage Tree Road, Williamtown, within the Port Stephens local government area.
Property Titles	Four titles within the Parish of Stockton, County of Gloucester including: <ul style="list-style-type: none"> • Lot 1 DP 224587 at 398 Cabbage Tree Road, Williamtown • Lot 121 DP 556403 at 282B Cabbage Tree Road, Williamtown. • Lot 11 DP 629503 at 282A Cabbage Tree Road, Williamtown. • Lot 1012 DP 814078 at 282 Cabbage Tree Road Williamtown.
Landowner	Port Stephens Shire Council under lease to Williamtown Sand with royalty of up to \$17.5 million over the Project life.
Area	Total Project Area of approximately 42.3 hectares from a Subject Land Area of approximately 176.2 hectares.
Proponent	Williamtown Sand Syndicate Pty Ltd, the owner of the quarry operator Newcastle Sand.
Stakeholders	Key stakeholders include: <ul style="list-style-type: none"> • Adjacent landowners and local community • NSW Planning, Housing and Infrastructure (DPHI) • NSW Office of Environment & Heritage (OEH) • NSW Department of Primary Industries - Office of Water • Hunter Water Corporation (HWC) • Port Stephens Council (PSC) • Department of Climate Change, Energy, the Environment and Water (previously Commonwealth Department of Environment)
Project Life	Up to 15 years. At expected demand the quarry will have an eight (8) year life, or six (6) years at maximum extraction rates.
Extraction Rate	Maximum of 530,000 tonnes per annum, and maximum daily rate of 3,000 tonnes.
Operating Hours	Construction of intersection, access and workshop and office: <ul style="list-style-type: none"> • 7:00am to 5:00pm Monday to Friday. • 8:00am to 1:00pm Saturday. • No works on Sunday or public holidays. Quarrying Operations: <ul style="list-style-type: none"> • 7:00am to 5:00pm Monday to Friday. • 7:00am to 4:00pm on Saturday. • No quarrying on Sunday or a Public Holiday. Loading and dispatch of trucks: <ul style="list-style-type: none"> • 6:00am to 6:00pm Monday to Friday. • 7:00am to 4:00pm Saturday. • No works on Sunday or public holidays.

Aspect	Key Aspects of the Project
Transport Rate	<p>The Applicant must ensure that:</p> <p>(a) speed limits of 40 km/hour for vehicles entering the site on sealed roads; 60 km/hr for vehicles exiting the site; and 20 km/hour for vehicles using all other roads and areas on site are applied and enforced.</p> <p>(b) trucks slowing to use the intersection of the quarry access road and Cabbage Tree Road do not use engine or compression braking systems.</p> <p>(c) laden truck movements exiting the site do not exceed 6 per hour during the period from 6 am to 7 am, Monday to Friday.</p> <p>(d) laden truck movements exiting the site do not exceed 10 per hour during the period from 7 am to 6 pm, Monday to Friday; and</p> <p>(e) laden truck movements exiting the site do not exceed 10 per hour during the period from 7 am to 4 pm, Saturdays.</p> <p>Note: In this condition, “per hour” means within any period of 60 minutes following the change of hour.</p> <p>The Applicant must ensure that if agreement is reached with adjoining residents under condition 1 of this Schedule, laden truck movements exiting the site do not exceed 6 per hour during the period from 5 am to 6 am, Monday to Friday.</p>
Resource and Products	<p>Approximately 3.25 Mt of sand, comprising the following products to be extracted from site by truck onto Cabbage Tree Road for transport to markets:</p> <ul style="list-style-type: none"> • Raw fill sand. • Screened sand. • Sandy loam. • Concrete sand. • Glass sand (estimated at about 16% of total resource). <p>The Project covers approximately 42.3 hectares (including access roads) with extraction to a depth of not more than 1m above the highest predicted groundwater level.</p>
Extraction	<p>The Applicant must not extract more than 530,000 tonnes of quarry products from the site in any calendar year.</p> <p>The Applicant shall ensure that a minimum 20 metre buffer of undisturbed land is maintained between the extraction areas and the boundary of the site, unless a written agreement exists with a neighbouring landowner to reduce the buffer adjacent to his/her property and a copy of this agreement is provided to the Department.</p> <p>The Applicant shall ensure that a minimum 50 metre buffer of undisturbed land is maintained between the extraction areas and any boundary of the site that is shared with Tilligerry State Conservation Area.</p>
Processing Methods	<ul style="list-style-type: none"> • Raw sand product extracted directly from face with no processing. • Sand fed into electrically powered screen. • Screened sand sold as product or fed to electrically powered air separator or wash plant. • Products stockpiled for loading directly into truck or fill bulker bags for removal from the site by truck.
Support Facilities and Utilities	<ul style="list-style-type: none"> • Site office, workshop, stores, car parking. • Power supply from local network • Water supply from local network.
Water Demand and Supply	<p>The Applicant must not undertake quarrying operations within 0.7 metres of the predicted maximum groundwater level. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply, to the satisfaction of the Secretary. The Applicant must not utilise, or otherwise interfere with, groundwater on the site, unless</p>

Aspect	Key Aspects of the Project
	<p>unavoidably associated with the construction and use of groundwater monitoring bores and the construction of quarry-related infrastructure. The Applicant must comply with the discharge limits in any EPL, or with section 120 of the POEO Act. The Applicant must operate the development so that it has a neutral or beneficial effect on the water quality of the Tomago Sandbeds Special Area. The Applicant must not store liquids other than water within the Tomago Sandbeds Special Area. Any liquids (other than water) kept on the site must be stored within a bunded and roofed area constructed in accordance with the relevant Australian Standards.</p>
Employment	<p>The Applicant must ensure that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities. Employees are combined full time employees and contracted and customer truck haulage operators.</p>
Community and Amenity	<p>The Applicant must establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. The CCC must be operated in general accordance with the Department’s Community Consultative Committee Guidelines, November 2016 (or later version). The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee and any interested person upon request. Up to \$17.5 million over the Project life in royalty payments to Port Stephens Council. A 20 m vegetated buffer from Cabbage Tree Road to minimise visual impacts for passing motorists and adjacent residents. A 75m long roadside buffer of retained vegetation along the sides on the access from Cabbage Tree Road. Real time triggers on air quality monitors to manage potential air quality impacts.</p>
Biodiversity Offset Strategy	<p>The Applicant must implement the Biodiversity Offset Strategy described in the EIS and acquire and retire biodiversity credits (within the meaning of the Biodiversity Conservation Act 2016) as set out in Tables 4 and 5 of the consent in accordance with the NSW Biodiversity Offsets Policy for Major Projects, to the satisfaction of the Secretary and BCD.</p>

2.3 ANNUAL REVIEW REPORTING REQUIREMENTS

Table 6 below outlines the annual review requirements under SSD-6125 and the sections the requirements have been addressed.

Table 6: Annual review requirements from SSD-6125

Condition	Addressed
Schedule 2, Condition 18 – Production Data	
<p>The Applicant must:</p> <p>(a) from the commencement of quarrying operations provide calendar year annual quarry production data to DRG using the standard form for that purpose; and</p> <p>(b) include a copy of this data in the Annual Review.</p>	<p>Section 4.1</p> <p>Note. As of the 2024-25 financial year, extractives producers are no longer required to provide their annual quarry production data to NSW Resources (formerly DRG).</p>
Schedule 2, Condition 21 – Contributions to Council	
<p>The Applicant must pay to Council an annual financial contribution toward provision of local infrastructure. The contribution must be determined in accordance with the Port Stephens S.94A Development Contribution Plan, or any subsequent relevant contributions plan adopted by Council. This contribution must be paid to Council prior to the issue of any construction certificate for the development. Any annual contributions must be paid to Council within one month of the anniversary date of this consent and reported in the Annual Review.</p>	<p>Section 4.2</p>
Schedule 3, Condition 28 – Vehicle Monitoring	
<p>The Applicant must provide a report in each Annual Review which includes details of all fauna injured or killed by development-related vehicles, time and date of any such fauna strike, species involved, action taken following the strike and any consequent measures put in place to prevent or minimise a recurrence.</p>	<p>Section 6.4.4</p>
Schedule 3, Condition 43 (d) – Waste	
<p>(d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.</p>	<p>Section 6.9</p>
Schedule 3, Condition 48 – Review of PFAS Exposure Pathways	
<p>In conjunction with preparation of each Annual Review, unless otherwise agreed with the Secretary, the Applicant shall engage a suitably qualified and experienced independent expert, approved by the Secretary, to review the currently available information on exposure pathways for PFAS contamination originating from the Williamstown RAAF Base, as may be applicable to local residents and the development. This report must assess whether or not quarrying operations are increasing the risk of PFAS exposure for local residents and/or the environment, to the satisfaction of the Secretary. The Applicant must ensure that the Review of PFAS Exposure Pathways reports are placed on its website and are available to the CCC and any interested person on request.</p>	<p>Section 7.8</p>
Schedule 5 Condition 11 – Annual Review	
<p>By the end of March each year, or other timing as may be agreed by the Secretary, the Applicant must submit a review to the Department reviewing the</p>	<p>This document</p>

Condition	Addressed
<i>environmental performance of the development to the satisfaction of the secretary. This review must:</i>	
a) <i>Describe the development (including any progressive rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year.</i>	Section 7.9
b) <i>Include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against the:</i>	This Document
<ul style="list-style-type: none"> • <i>Relevant statutory requirements, limits, or performance measures/criteria;</i> 	Summarised in Table 10 Outlined further in Section 6, 7 & 7.9
<ul style="list-style-type: none"> • <i>Requirements of any plan or program required under this consent;</i> 	
<ul style="list-style-type: none"> • <i>Monitoring results of previous years; and</i> 	
<ul style="list-style-type: none"> • <i>Relevant predictions in the documents listed in condition 2(d) of Schedule 2;</i> 	
c) <i>Identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;</i>	Section 5
d) <i>Identify any trends in the monitoring data over the life of the development;</i>	Section 6, 7 & 8
e) <i>Identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</i>	
f) <i>Describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.</i>	Section 12
<i>The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee and any interested person upon request.</i>	This document

The monitoring program was reviewed during the reporting period. The program remains appropriate for assessing environmental performance. Minor refinements were implemented through the updated SWMP (2025), including revised trigger values and monitoring locations.

3. APPROVALS

The approved Development Consent (SSD-6125) to operate has been developed for the Williamtown Sand Syndicate, the owner, operator and proponent of Newcastle Sand. However, for this Annual Review the site will be referred to as 'Newcastle Sand'.

3.1.1 NSW Development Consent

Project Approval was granted under the *Environmental Planning and Assessment Act 1979* (EP&A Act) by the NSW Independent Planning Commission on 9 May 2018 (amended by Modification 1 in March 2020 and by Modification 2 in March 2021) subject to Development Consent SSD-6125 conditions. Modification 3 lodged in 2023 sought to increase disturbance and production, the application was withdrawn and is not proceeding. Modification 4 lodged in 2025 proposes a Western extension, changes to biodiversity commitments and is currently under assessment. See **Section 3** regarding the status of the Development Consent and modifications.

On 9 May 2018, Development Consent SSD-6125 was approved under Section 4.38 of the Environment Planning and Assessment Act 1979 (EPA Act, 1979). Works commenced onsite on 14 August 2019 and focused on construction of the access road and office and workshop compound.

Modification 1 was approved on 26 March 2020 and permitted the transport of 5,000 tonnes of sand from the site prior to the completion of the intersection with Cabbage Tree Road. The purpose of the modification was to enable a trial on the suitability of the white sand onsite for use in glass manufacturing. The activity proposed by this modification has now been completed. Newcastle Sand was provided notice of practical completion for the intersection from Transport for NSW on 14 May 2020, with the first truck leaving site via the completed intersection on 18 May 2020. 2021 was the first year containing a full 12 months of operational activity.

Modification 2 (current) was approved in 2021 and permitted the use of a wash plant in place of the air separator system. During 2022, relocation of the wash plant to Sector 3 was commenced along with improvements to the design. The project approval can be found at the Newcastle Sand website:

<https://www.newcastlesand.com.au/state/>

Modification 3 (withdrawn) was lodged in December 2022 and provided for minor amendments to the resource boundary and corresponding amendments to the approved Biodiversity Offset Strategy and associated conditions. The modification also sought approval to import Virgin Excavated Natural Material (VENM) sand and minor amendments to approved working methods and the Statement of Commitments. Modification 3 has now been withdrawn.

Modification 4 (in application) was lodged in March 2025 and addresses demand for construction sand in NSW, where supply is limited. The Modification includes a 7.3ha extraction extension to the west, with a net reduction in impact areas and an increased Biodiversity Stewardship Area. It updates the Biodiversity Offset Strategy to reflect boundary changes and additional credit requirements. Amendments to streamline commitments, reduce duplication, and allows for management plans to adapt as the quarry continues. The modification permits import of 6,000 tonnes of VENM sand annually for processing. It also clarifies extraction and rehabilitation methods and updates the radiation survey condition (Schedule 3, Condition 46). The Modification enables the extraction of 533,000 additional tonnes of sand, extending quarry life by 12 months without increasing extraction rates, haulage, or hours of operation.

3.1.2 Commonwealth Approval

Commonwealth Approval (EPBC 2016/7852) was granted on 12 December 2018 to undertake the project under sections 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), by the Department of Climate Change, Energy, the Environment and Water (DCCEE). Conditions of the approval are based largely on the NSW approval with some additional conditions to ensure compliance.

3.1.3 Environment Protection Licence

Environment Protection Licence (EPL) 21264 has been issued by the NSW Environment Protection Authority (EPA) under the *Protection of Environment Operations Act 1997* (POEO Act), pursuant to Schedule 1, Clause 16 “Crushing, grinding or separating” and Clause 19 “Extractive activities”. A copy of the EPL can be found at the website:

<https://www.newcastlesand.com.au/environmental-protection-licence/>

3.1.4 Further Permits and Licences

The following permits and licences are in place to operate the quarry:

- Section 138 Roads Act 1993 Permit issued by Port Stephens Council for works related to public road infrastructure, including the intersection of the quarry access road with Cabbage Tree Road.
- Access and Extraction Agreement with Hunter Water Corporation, permit of extractive industry operations within the Tomago Sandbeds Special Area, subject to conditions to provide a neutral or beneficial effect on water quality.
- Land Lease Agreement with Port Stephens Council, over the land on which the quarry operates.

4. OPERATIONS SUMMARY

4.1 PRODUCTION

4.1.1 EIS Predictions

The total extractable resource is estimated at approximately 3.32 million tonnes (Mt) over the life of the quarry. Annual extraction rate was estimated at approximately 300,000 tonnes per annum (tpa) up to a maximum of 600,000 tpa and was approved to 530,000 tonnes per annum. The approved operational lifespan equates to 15 years, allowing flexibility for potential production delays and staged rehabilitation.

4.1.2 Production Data

During the reporting period, quarrying operations continued within approved extraction areas, with no exceedance of approved extraction limits (530,000 tpa). Key activities included continued extraction and processing, operation of the wash plant as approved under MOD2 and progressive rehabilitation of completed areas.

Quarry production commenced on 18 May 2020 with the first product truck (outside of the glass sand trial) being dispatched from site. Production since the quarry commenced is summarised below in **Table 7** in accordance with Schedule 2 Condition 18 (a) and (b). The production data for 2026 is forecasted to be below the approved maximum rate of 530,000 tonnes.

The NSW Government's, Regional NSW, Mining, Exploration and Geoscience (MEG) group Return 2020 form is used for estimating royalties for mineral extraction. The quarry pays royalties to Port Stephens Council only. The form includes data on "Natural Sand" production, sales value, and employee count. In correspondence with MEG on 20 January 2026, as of the 2024-25 financial year, extractives producers are no longer required to provide their annual quarry production data to NSW Resources (formerly DRG), the data outlined in this Annual Review aligns with Schedule 2 Condition 18 requirements.

Table 7: Production Data in Tonnes

Product Type	2020	2021	2022	2023	2024	2025
Natural Sand * (t) Screened only or raw sand (includes sales of landscape, screened, glass and fill sand)	129,311	222,245	112,950	47,971	27,775	83,790
Natural Sand * (t) Estimate of sand washed in wash plant (includes sales of concrete sand – adjusted for the wash plants operational time and washed sand)	-	138,500	330,618	426,306	394,424	373,445
Annual Total of 'Natural Sand'* (t)	129,311	360,745	443,568	474,277	439,678	457,235
Approved Maximum and Assessed Rate (t)	530,000	530,000	530,000	530,000	530,000	530,000
Actual Cumulative Extracted Total (t)	129,311	490,056	933,624	1,407,901	1,847,579	2,304,814
<i>* 'Natural Sand' is the reportable attribute for Regional NSW Extractive Materials Return 2020</i>						

4.1.3 Employment Summary

Employment and trucking data are summarised in **Table 8**.

Table 8: Employment and trucking data

Aspect	Comment
Employment	During the 2025 Period Newcastle Sand had a total of 11 full time employees. During this period, no additional contractor operators were engaged periodically for additional tasks.
Total No. of Trucks	12,938 trucks collected sand from the quarry. Truck data is further outlined in Section 6.7 .

4.2 CONTRIBUTIONS TO COUNCIL

No Construction Certificates have been required for the earthworks and installation associated with temporary structures which construction has been limited to, therefore, no associated contributions were required during the reporting period.

In accordance with Schedule 2 Condition 21, a levy to the Council has been paid in accordance with the lease agreement for each tonne of sand sold from the quarry, amounting to five dollars

per tonne plus indexations, equating to approximately \$2,995,053 in 2025 and \$13,906,757.62 to date.

4.3 EXTRACTION SUMMARY

Extracted material versus product sold from site is likely to vary with the extent of the silt that is removed from the sand prior to sale. Silt content varies throughout the resource from 1-2% to approximately 8% by volume. Silt contains fine sand, and organic particles where the density lower than the product sand. On average, it would be expected approximately 3% by weight of silt would be removed during the washing process.

In 2025, 457,235 total tonnes of material were transported from the quarry, with approximately 81% of the sand washed. Extraction volumes were compliant with the approved rate of 530,000 tpa. Clearing and extraction continued within Section 8B, 10A, 10B, 10C occurred in response to glass sand demand.

By the end of 2025, rehabilitation of the extracted portions has been completed at Sectors 1A, 2, 3A, 3B, 4, 4A, 4B, 5, 5A, 5B, 6A, 6B, 7, 7A, 8, 8A and 8B. Extraction areas surveyed remain within the approved extraction boundaries and comply with the requirement to maintain a minimum separation of 0.7 m above the predicted maximum groundwater level. No exceedances were identified, and all active areas align with approved limits shown in the Extraction Survey Plan (**Appendix 1**).

4.4 FORECAST OPERATIONS FOR THE NEXT REPORTING PERIOD

Throughout the next reporting period (calendar year 2026) the operations will continue to be developed and refined in response to the sand resource and market demands.

- Sectors 10A, 10B and 10C are scheduled for completion in 2026. Subsequent forecast sectors are Sectors 9A and 9B as shown in **Figure 2**.
- Continued progressive rehabilitation as the operations continue.

4.5 HOURS OF OPERATION

Schedule 3, Condition 1 relates to the permissible hours of operating hours, activities performed during this period. During the period all quarry operations were completed within the prescribed times. No loading or dispatch of laden trucks occurred outside the permissible times. The front gate locks, with aligning employees start and finish times in the criteria outlined in **Table 5**. The weighbridge data, signage, and CCTV footage on site serve as evidence and comply with the operating conditions outlined in Schedule 3 Condition 4 of the SSD-6125.

5. ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW

5.1 FEEDBACK ON 2024 ANNUAL REVIEW (DPHI)

The DPHI responded to the submission of Newcastle Sand Annual Review 2024 on 12 June 2025 with:

“NSW Planning has reviewed the Annual Review and considers it to generally satisfy the reporting requirements of the consent and the NSW Planning Annual Review Guideline (October 2015). Please make publicly available a copy of the 2025 Annual Review on the company’s website within 30 days. Please note that the NSW Planning’s acceptance of this Annual Review is not an endorsement of the compliance status of the project.”

The 2024 Annual Review and letter from the DPHI was uploaded to the website following approval letter by DPHI. Table 9 outlines actions taken by Newcastle Sand from the previous Annual Review.

5.2 ACTIONS FROM THE PREVIOUS ANNUAL REVIEW (NEWCASTLE SAND PROPOSED ACTIONS)

Table 9: Actions from the Previous Annual Review (Newcastle Sand)

Action required from previous Annual Review	Requested by	Action taken by the Operator	Where discussed in Annual Review
Publicly available a copy of the 2025 Annual Review on the company’s website within 30 days.	DPHI	Completed by Newcastle Sand within the timeframe proposed.	Section 5.1
To assist with this assessment, under the provisions of Schedule 2 condition 4 of the consent, as nominee of the Planning Secretary, I require you to provide an update on the status of the Biodiversity and Rehabilitation Bond review via the Major Projects Portal by 30 June 2025.	DPHI	Newcastle Sand provided the Department with the Biodiversity and Rehabilitation Bond via the Major Projects Portal on the 20 August 2025 after an approved extension. The Department approved the Biodiversity and Rehabilitation Bond on the 12 February 2026.	Section 8.1.1

6. ENVIRONMENTAL PERFORMANCE

The Annual Review reports on the environmental outcomes that were intended for the reporting period and whether these were achieved. This section identifies and includes any requirements under relevant management plans which are not specifically dealt with under other sections of the Annual Review (Water in **Section 7** and Rehab in **Section 8**). Details include:

- Environmental Impact Statement (EIS) predictions prior to obtaining the approval of the Development Consent.
- identification of key environmental performance or management issues that arose during the year and how they were addressed.
- implementation of environmental management measures.
- proposed improvements to environmental management or performance.

An evaluation of the predicted development impacts against the observed impacts is summarised within the **Table 10**. In terms of time since commencement, the quarry is effectively in operation Year 6.

Table 10: Development Impact Prediction Evaluation Against EIS Summary

Aspect	Predicted Impact	Observed Impact	Above / below / As Expected	Comment
Extraction Rate	Maximum rate of 530,000 tonnes.	457,235 tonnes extracted, 86% of the approved maximum extraction rate in 2025.	Below maximum.	Extraction rates remained within approved limits and below maximum capacity, consistent with operational demand and EIS assumptions.
Noise	Operational noise levels at neighbouring properties at the current stage of works were modelled to be less than 35dB(A) at neighbouring properties.	Operationally, noise levels are potentially lower than modelling predicted. Quarry noise remains generally inaudible during noise monitoring periods. Traffic noise remains the primary noise source at properties closest to the quarry. Outlined further in Section 6.1 .	As expected.	Noise performance aligns with predictions. Existing controls (distance, attenuation, operating hours) remain effective.
Air Quality	Air quality modelling predicted that cumulative annual criteria for dust deposition and PM10 would be met. The modelling predicted at full production there was a small chance for isolated exceedances of 24-hour criterion occurring 1-2 days per year.	Air quality impacts due to the project are consistent with the modelling expectations with typically low contribution levels. There was two PM ₁₀ short term exceedances this was due to nearby earthworks. There were also elevations in real time monitoring throughout the year outlined further in Section 6.3 .	As expected.	Exceedances consistent with EIS predictions of occasional events. No exceedances attributable to quarry operations.
Biodiversity	Vegetation clearing impacts offset, no net loss with implementation of	Clearing undertaken in accordance with BRMP (except isolated offset disturbance not completed by the site). No fauna incidents.	As expected.	Biodiversity outcomes consistent with EIS predictions. Offset implementation ongoing; no

Aspect	Predicted Impact	Observed Impact	Above / below / As Expected	Comment
	offset strategy. Fauna impacts manageable.	Monitoring ongoing. Frog monitoring constrained by rainfall, outlined further in Section 6.4.2.		evidence of significant ecological impact.
Truck	Up to ~200 truck movements per day at full capacity; minor to moderate impacts manageable with controls.	Daily movements typically 30–110 trucks/day. No exceedance of hourly or daily limits. No complaints. Outlined further in Section 6.7.	Below	Traffic volumes remain well below EIS worst-case predictions. Impacts on local road network are minimal and within assessed limits.
Heritage	Low archaeological sensitivity, impacts manageable with standard protocols.	RAP inspections completed during clearing. No incidents.	As expected	Management measures effective. No heritage impacts beyond those predicted in EIS.
Water (Surface Water and Groundwater)	Minimal impact to groundwater levels and quality. No significant surface water impacts.	Groundwater level exceedances (TARP) observed due to high rainfall. No adverse water quality impacts. Surface water stable.	As expected	Groundwater responses consistent with climatic conditions rather than operational impact. No evidence of project-related water impacts.
PFAS	Low risk of mobilisation; no increase in exposure pathways with appropriate controls.	PFAS not detected above trigger levels in groundwater or surface water. Exposure pathway review confirms low risk.	As expected	Monitoring confirms EIS prediction. Quarry operations not contributing to PFAS risk.
Rehabilitation	Progressive rehabilitation to restore native vegetation and achieve stable landform.	Rehabilitation progressing with variable success (approx. 48% survival in some areas). No erosion or major failure observed.	Below.	Rehabilitation is progressing consistent with early-stage expectations. Some variability due

Aspect	Predicted Impact	Observed Impact	Above / below / As Expected	Comment
				to seasonal conditions and adaptive management is ongoing.
Waste Management	Waste to be minimal and managed appropriately with no off-site impacts.	Waste managed via licensed contractors. No incidents recorded.	As expected	Waste management practices effective and compliant with regulatory requirements.
Energy Use	Moderate energy use predicted with efficient operations.	Electricity usage below predictions, diesel usage higher than estimated.	Above (diesel) / Below (electricity)	Increased diesel use reflects operational requirements and equipment reliance. Efficiency improvements implemented (e.g. upgraded generator).

6.1 NOISE

6.1.1 EIS Predictions

Operational noise (extraction, loading, haulage) predicted to comply with NSW Noise Policy for Industry (NPI) criteria at surrounding receptors. Predictions identified as low risk and are manageable with mitigation. Key sources are mobile plant, trucks, and processing activities. Mitigation assumed in EIS are restricted operating hours, the use of attenuation (distance, vegetation, stockpiles) and equipment selection and maintenance. Residual noise impacts predicted to be low and acceptable, with compliance achievable under standard controls.

6.1.2 Approved Criteria

Table 11: Noise Criteria (SSD-6125)

Receiver	Day <i>L_{Aeq} (15 minute)</i>	Shoulder <i>L_{Aeq} (15 minute)</i>	Shoulder <i>L_{AMAX} (1 minute)</i>
Any residence on privately owned land	43	39	45

6.2 KEY ENVIRONMENTAL PERFORMANCE

6.2.1.1 Operational Noise Monitoring Results

The quarry became operational in May 2020 and noise monitoring has been undertaken on a quarterly basis, as prescribed within the Development Consent, Noise Management Plan and EPL. On each occasion, traffic was the dominant noise source. **Table 12** provides the noise monitoring results and compliance for the 2025 period. See **Appendix 2** for the full Noise Monitoring Reports.

Monitoring occurred quarterly during 2025 on the following dates:

- 26, 27 and 28 March 2025
- 4, 5 and 6 June 2025
- 24, 25, 26 September 2025
- 15, 16 and 17 December 2025

Each monitoring event completed, occurs for over 30-minute (morning-shoulder) and 1.5-hour (day) compliance measurement periods. The noise from the sand quarry was inaudible at the monitoring location (R14), operational noise levels remained within project approval limits at all receivers.

Table 12: Noise Monitoring Results for 2025 Monitoring Period

Receiver No.	Quarrying Noise Criteria (Condition 3, SSD-6125)	Noise Sampling Time	March (Q1)		June (Q2)		September (Q3)		December Q4	
			2025		2025		2025		2025	
			Noise Contribution	Compliant	Noise Contribution	Compliant	Noise Contribution	Compliant	Noise Contribution	Compliant
R14	43	Day LAeq (15 min)	26 th – IA 27 th – 25 28 th - 26	Yes	IA	Yes *	IA	Yes **	IA	Yes ***
	39	Shoulder LAeq (15 min)	26 th – IA 27 th – 29 28 th - 30	Yes	IA	Yes *	IA	Yes **	IA	Yes ***
	45	Shoulder LA Max (1 min)	26 th – IA 27 th – 29 28 th – 30	Yes	IA	Yes *	IA	Yes **	IA	Yes ***

*Noise measurements were made under compliant meteorological conditions, except for both monitoring periods on the 4 June 2025.

**Noise measurements collected during September were made under non-compliant meteorological conditions.

***All noise measurements were made under compliant meteorological conditions, except for those undertaken on the 15 December 2025.

6.2.1.2 Noise Data Long Term Trends

Since operation in May 2020, the quarry (and its noise sources) has progressively moved away from the residences located south of Cabbage Tree Road. Operational noise monitoring results show compliance with the criteria specified in the project approval on all occasions during the reporting period.

Sectors 9 and 10 will move toward Cabbage Tree Road be extracted last to retain the natural sound attenuation of the sand dunes for as long as possible and it is recommended that Newcastle Sand complete periodic attended noise monitoring when extracting in those areas, this will continue in the 2026 period.

6.2.2 Management Measures

Management includes continued restricted operating hours, the use of attenuation (distance, vegetation, stockpiles) and equipment selection and maintenance. No exceedances from the quarry were recorded during the reporting period. Noise impacts are generally compliant and effectively managed.

6.2.3 Proposed Improvements

Continue noise monitoring in accordance with the development consent, EPL and relevant management plan.

6.2.4 Noise Complaints

During the 2025 reporting period, no noise-related complaints were received from the community or other stakeholders. Operations were managed in accordance with applicable noise management requirements, and no noise exceedances or incidents were recorded. The last noise complaint was recorded on 19 January 2024.

6.3 AIR QUALITY

6.3.1 EIS Predictions

The main EIS predicted impact based on assessment regarding particulate matter (PM₁₀ and total suspended particulates (TSP) from extraction and handling, haulage and wind erosion from exposed surfaces Modelling predicted compliance with air quality criteria at all sensitive receptors. The EIS also predicted low to moderate dust risk, but compliant with criteria when managed accordingly.

6.3.1 Approved Air Quality Criteria

Newcastle Sand “*must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria*” in **Table 13** at any residence on privately-owned land.

Table 13: Air Quality Criteria

Pollutant	Averaging Period	Criteria*
Particulate matter < 10 µm (PM10)	Annual	^{a c} 25 µg/m ³
Particulate matter < 10 µm (PM10)	24-hour	^b 50 µg/m ³
Total suspended particulates (TSP)	Annual	^{a c} 90 µg/m ³

Where:

a – Cumulative impact (i.e. increase in concentrations due to the project plus background concentrations due to all other sources)

b – Incremental impact (i.e. increase in concentrations alone, with zero allowable exceedances of the criteria over the life of the project)

c – Excludes extraordinary events such as bushfire, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by DPIE.

* Based on standard air quality assessment criteria in the *Approved Methods for Modelling and Assessment of Air Pollutants in NSW 2007*

6.3.1.1 Air Quality Monitoring Network

The air quality monitoring network comprises of the following components:

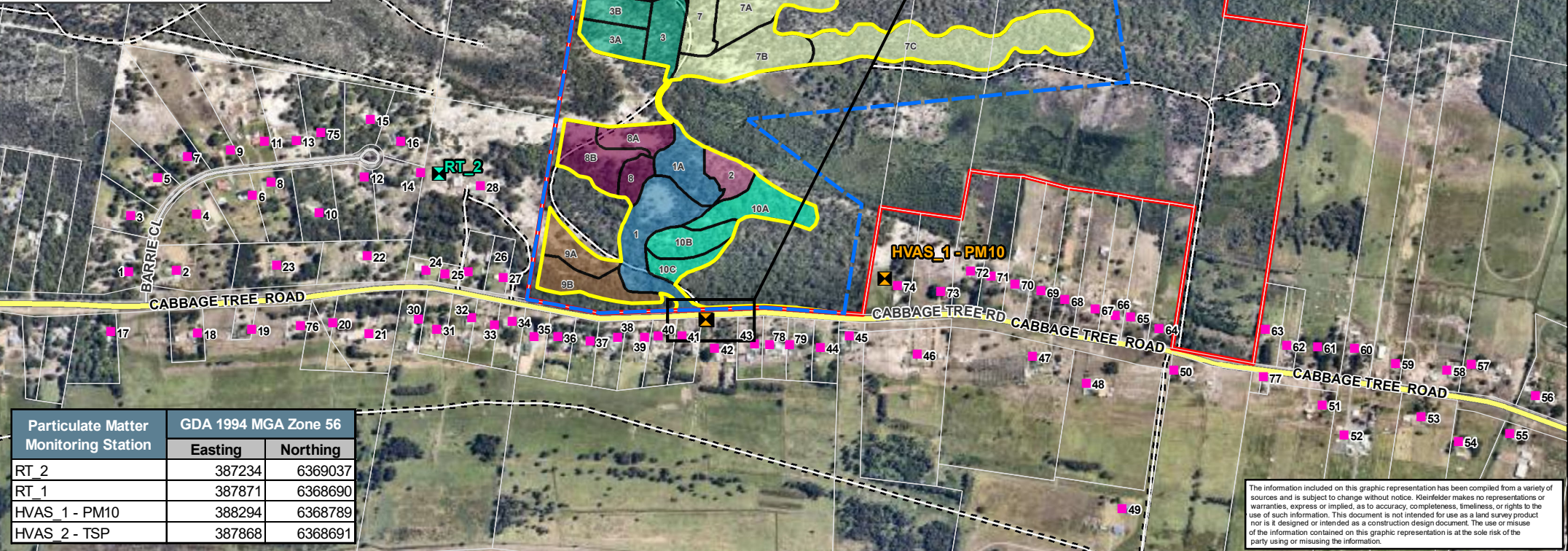
- Two Beta Attenuation Monitors (BAM) real-time compliance monitors (RT1 and RT2) measuring PM₁₀, were installed between the quarry and dwellings to the south and west of the quarry. Each real-time monitor is reviewed against wind direction to enable contributions from the quarry to be better determined.
- A High-Volume Air Sampler (HVAS) with a PM₁₀ inlet is located to the east of the quarry.
- A HVAS measuring TSP is located to the south of the quarry, adjacent to RT2.

The network was established prior to the commencement of quarrying onsite to better establish site-specific background conditions. Locations of the installed air quality monitoring units are provided in **Figure 4**.

Newcastle Sand utilises local meteorological data to observe current and predicted wind speed and direction data which generates site specific meteorological data records within the requirements of the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales guideline*. Access to Bureau of Meteorology forecasts and real time alert systems are used to allow preparedness for elevated wind and potential air quality control requirements.

Sector			
1	4	7	10
2	5	8	
3	6	9	

Processing Plant	Sectors Processed
Years 1 & 8	1, 1A, 10A, 10B, 10C
Year 2	2, 3
Years 2 & 3	3A, 3B, 4
Year 3	4A, 4B, 5
Years 3 & 4	5A, 5B, 6
Year 4	6A, 6B, 7
Years 5 & 6	7A, 7B, 7C, 8
Years 6 & 7	8A, 8B, 9A, 9B



Particulate Matter Monitoring Station	GDA 1994 MGA Zone 56	
	Easting	Northing
RT_2	387234	6369037
RT_1	387871	6368690
HVAS_1 - PM10	388294	6368789
HVAS_2 - TSP	387868	6368691

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Legend

- Subject Land Boundary
- Project Area Boundary
- EPL Premises Boundary
- Lot Boundary
- Receptor
- Arterial Road
- Local Road
- Track
- Proposed Particulate Matter Monitoring Locations
- High Volume Air
- Real-time Monitor

Metres

0 50 100 200 300 400 500

N

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PROJECT REFERENCE: 20190803

DATE DRAWN: 22/07/2019 15:37 Version 2

DRAWN BY: BDearne

DATA SOURCE:
NSW DFSI - 2017
Nearmap - 2019

**Particulate Matter
Monitoring Locations**

Cabbage Tree Road Sand Quarry
Cabbage Tree Road, Williamtown, NSW

FIGURE:
4

6.3.1 Key Environmental Performance

Air quality monitoring and management were undertaken in accordance with the Air Quality Management Plan. Elevations occurred but were attributed to external/non-project sources. No complaints relating to dust or air quality were received and air quality impacts remain consistent with predicted levels and are effectively managed through site controls.

6.3.2 Air Quality Results

All elevations of PM₁₀ criteria were attributed to external activities or non-operational factors, consistent with predicted results and do not represent project-related non-compliance.

6.3.2.1 High Volume Air Samplers (HVAS) PM10 & TSP Results

Data represented in summarises the air quality monitoring results and performance at each of the monitoring sites for the reporting period for HVAS PM₁₀ and TSP results. Additionally, VGT completed the 2025 air quality monitoring results, provided in **Appendix 3**. Measured over 24 hours every 6 days for each of the monitoring locations during the reporting period. At the end of 2025 results determined that the rolling annual average PM10 reached **17.08 µg/m³**, an increase from **15.6µg/m³** recorded in 2024, while below the rolling average limit of 25 µg/m³. For TSP, at the end of 2025, the rolling annual average for the 2025 period was **32.49 µg/m³**, an increase from **24.9 µg/m³** in 2024, and below the limit of 90 µg/m³.

- During the 2025 reporting period, the 24-hour PM₁₀ criterion was exceeded on two occasions. On 28 August, a 24-hour average of 78.0 µg/m³ was recorded compared to 50 µg/m³, however, due to technician error of replacing the monitoring paper, an error also affected the monitoring run six days later on 3 September 2025. Elevated levels during this period were attributed to earthworks undertaken in a paddock to improve drainage, additionally this was reported to DPHI.
- Another exceedance occurred on 9 October 2025, with a 24-hour average of 121 µg/m³, which was similarly attributed to earthworks on the property at the time and reported to the DPHI.

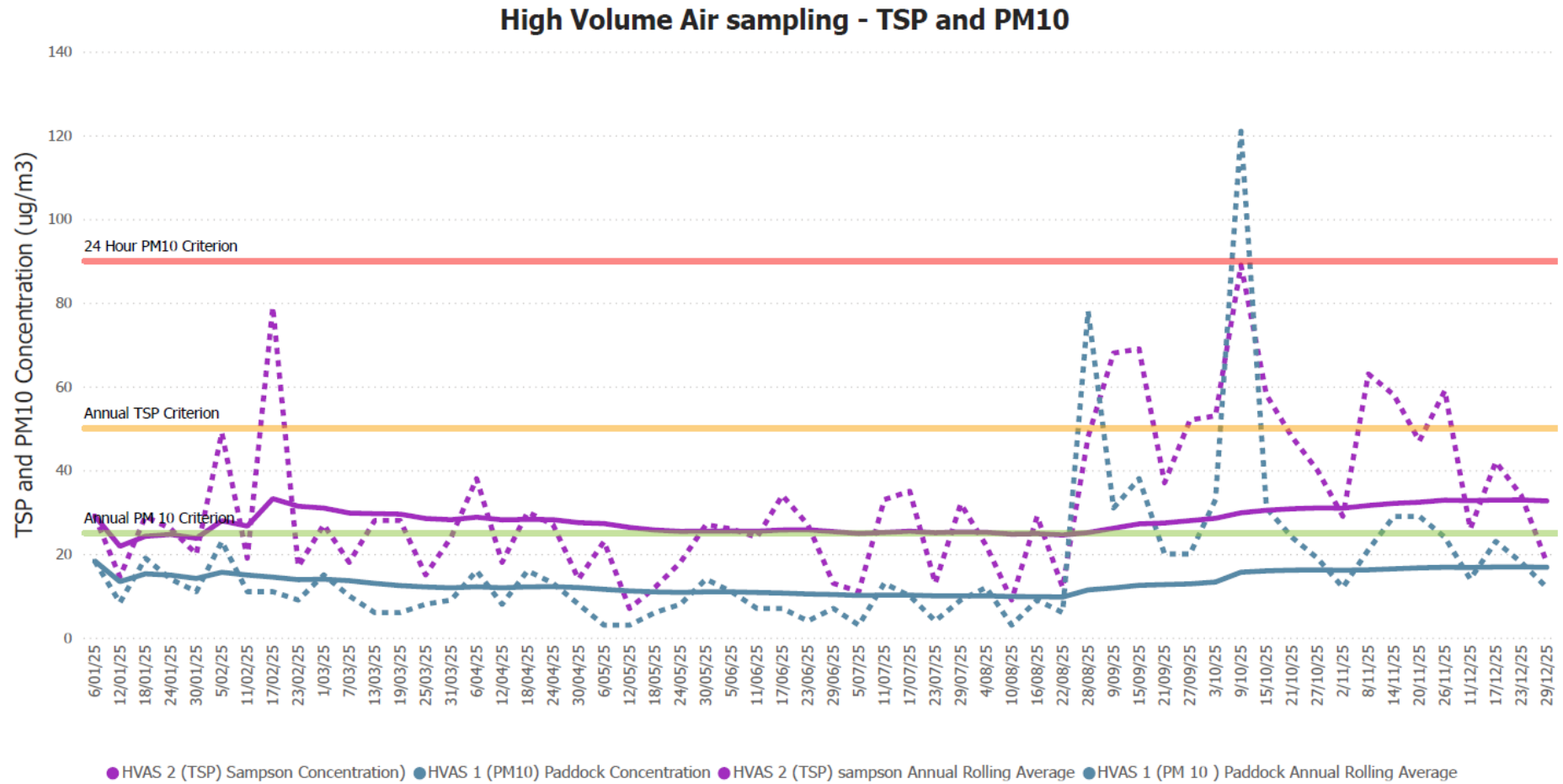


Figure 5: Air Quality HVAS Results of TSP & PM10 2025

6.3.2.2 Real Time Monitoring Results

Two real-time PM₁₀ monitors, RT1 and RT2, installed at the quarry, guide proactive and reactive mitigation measures. RT2, situated west of the quarry, establishes baseline conditions during north-westerly winds, assessing the quarry's contribution to dust measured at RT1 to the south, and vice versa during south-easterly winds. The long-term results are outlined below. The management framework incorporates staged reactive measures based on wind direction and PM10 levels, westerly winds pose the greatest air quality impact risk to receptors south of the quarry.

Figure 6 and **Figure 7** represent the BAM monitoring results with the rolling 24-hour average results as per the criteria.

Sampson (RT1)

- March elevation: RT1 (Sampson) BAM real time monitor reported an elevation of TARP level 6 of the AQMP (Rolling PM₁₀ > 50 µg/m³) leading up to the 12 March 2025. A pronounced PM₁₀ peak in March 2025 was consistent with elevations recorded at EPA BAM stations (Stockton, Newcastle and Beresfield). Combined with prevailing onshore winds, indicating regional background event (marine aerosol influence). Additionally, levels at Hardes (RT2) remained consistently low during March 2025, with no exceedances of the applicable criteria, supporting that ambient conditions at this location were not significantly elevated strongly supporting a background event, confirmed by the air quality report outlining weather event at the time of the elevations occurred. Using compliance elevation in the management plan (Section 6.7) RT2 shows:
 - Low PM₁₀ during the same period.
 - No sustained elevation.
 - Only isolated spikes (faults).
- November elevation: RT1 (Sampson) BAM real time monitor at approximately 11:00pm on 27 November 2025, the RT1 (Sampson) BAM real time monitor reported an exceedance of TARP level 6 of the AQMP (Rolling PM₁₀ > 50 µg/m³). The cause of the elevation was predominately due to significant dust levels occurring between 6pm and 2am, outside of operating hours. This was reported to DPHI.

Hardes (RT2)

- The Hardes (RT2) monitor recorded no exceedances of the applicable PM₁₀ criteria during the reporting period.
- Two isolated events identified as unit faults, with investigations confirming the data at RT1 recorded no representative of elevated air quality. No compliance triggers were activated for Sampson (RT1) were activated in the monitoring period.

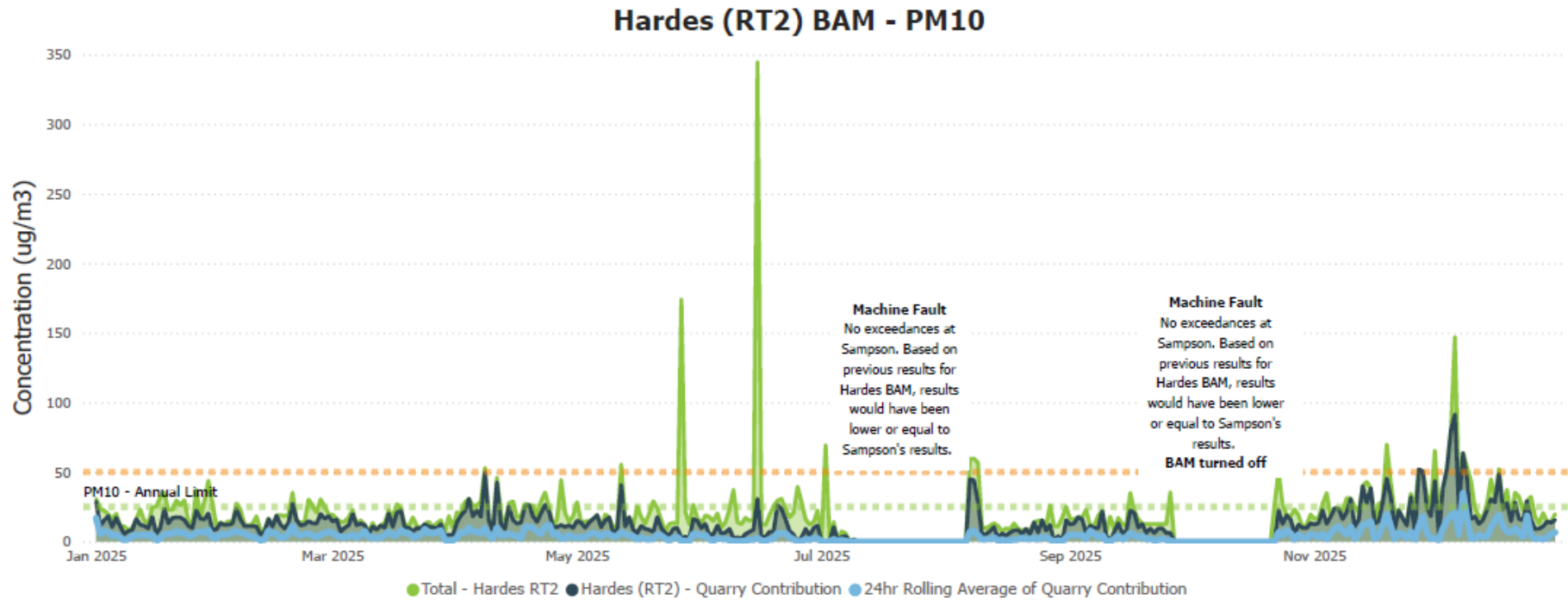


Figure 6: Air Quality Hardes (RT2) 24 Hour Rolling Average Criteria Results 2025

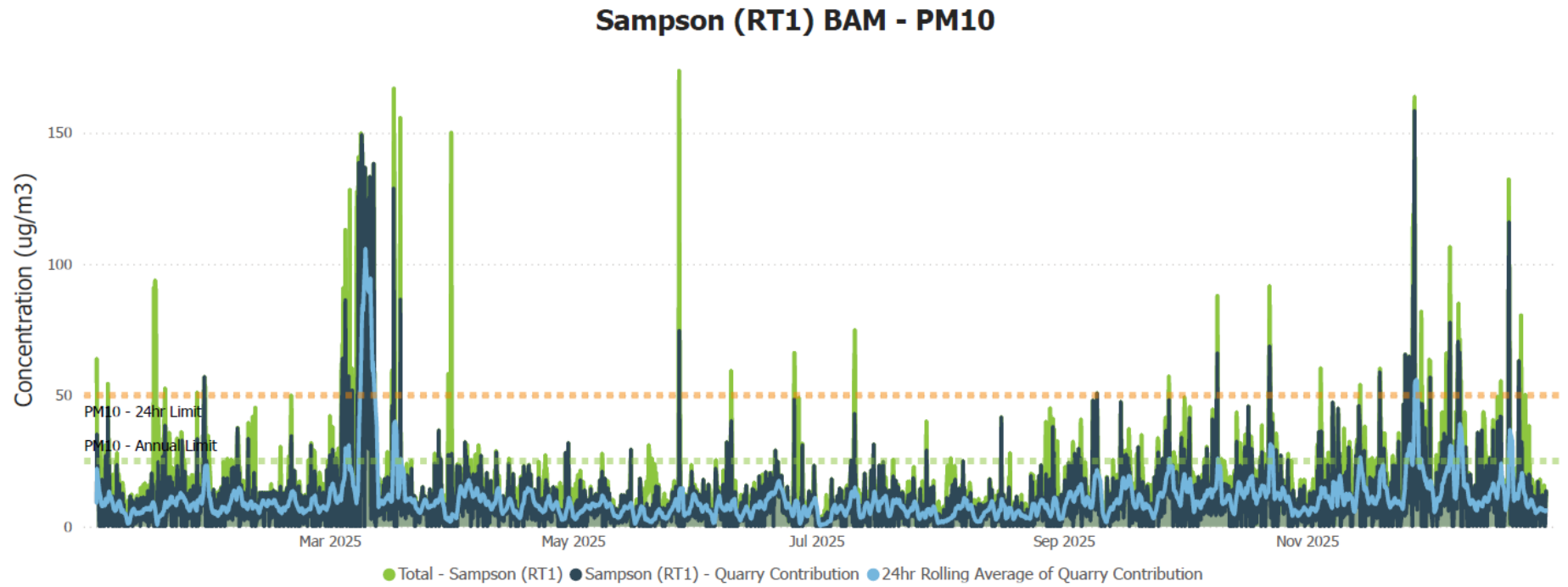


Figure 7: Air Quality Sampson (RT1) 24 Hour Rolling Average Criteria Results 2025

6.3.3 Air Quality Long Term Trends

Long-term air quality monitoring at the Newcastle Sand site continues to demonstrate that particulate matter concentrations are generally consistent with regional background conditions and within the expectations outlined in the Environmental Impact Statement (EIS).

Table 14: Long Term BAM Monitoring Results (2020-2025)

BAM Monitoring Station	Rolling 2020 12 Month Average ($\mu\text{g}/\text{m}^3$)	Rolling 2021 12 Month Average ($\mu\text{g}/\text{m}^3$)	Rolling 2022 12 Month Average ($\mu\text{g}/\text{m}^3$)	Rolling 2023 12 Month Average ($\mu\text{g}/\text{m}^3$)	Rolling 2024 12 Month Average ($\mu\text{g}/\text{m}^3$)	Rolling 2025 12 Month Average ($\mu\text{g}/\text{m}^3$)
RT1 (South of site and south of Cabbage Tree Road)	15.0	12.6	10.5	13.0	14.2	14.15
RT2 (West of site and north of Cabbage Tree Road)	12.6	7.4	7.1	8.8	9.3	6.59

Analysis of monitoring data over the reporting period and previous years indicates that annual average PM_{10} concentrations remain generally consistent with the relevant assessment criteria, indicating no sustained air quality impact attributable to site operations. Short-term elevated PM_{10} concentrations (24-hour exceedances) occur intermittently and are consistent with regional trends observed across nearby monitoring stations.

Comparison with historical data shows no increasing trend in particulate concentrations over time, with variability largely driven by climatic conditions rather than operations. Periods of lower rainfall in 2025 correspond with increased dust potential across the region, reflected in both site and background monitoring data. Overall, the long-term monitoring results indicate that air quality impacts from the project remain consistent with EIS predictions. There is no evidence of cumulative or increasing impact attributable to quarry operations.

6.3.1 Trigger Response Effectiveness

The air quality management plan provides for a series of control measures to actively reduce air quality emissions from the quarry using the near-real-time BAM air quality monitors. Early detection alerting system has been applied to the site with alarm escalations provided to operations personnel. Stage 1 trigger alerts are routinely delivered, detailing the air quality status and prompts to ensure dust suppression activities are active, providing effective real time trigger response evaluations. Newcastle Sand respond to activities for example water cart logs for when these alerts are enacted.

6.3.2 Air Quality Operating Performance

HVAS

Over the 2025 monitoring period there has been no occurrences where components of the monitoring system have not performed as required, one instance of sampling error occurred and was reported to the DPHI. Since June 2024, the HVAS unit has run with no operating errors and remained generally compliant with air quality calibration requirements.

Real Time Monitors

The real time monitors continue to allow Newcastle Sand to action elevations in real time as per the AQMP, machine faults at Hardes (RT2) throughout 2025 identified. Sampson (RT1) continued throughout these periods and show no elevations requiring reporting or noncompliance from quarry contribution alone.

6.3.3 Management Measures

Site operational controls, including water carts, progressive rehabilitation, and traffic management, continue to effectively minimise dust generation. Existing management measures remain appropriate and effective. Continued measures include:

- Watering of haul roads and stockpiles
- Progressive rehabilitation
- Real-time monitoring and trigger-response framework
- Continued HVAS monitoring as per consent and EPL

6.3.4 Proposed Improvements

Given the location of the HVAS, and the elevated levels due to external sources the site will investigate alternative locations for the sampling units to better represent the site.

6.3.5 Air Quality Complaints

No complaints were received in relation to air quality during the recording period.

6.3.6 Comparison to EIS predictions

The EIS predicted the project is unlikely to cause exceedances under normal operations, the monitoring results for 2025 are consistent with EIS predictions. While elevated PM₁₀ concentrations were observed during March and November 2025, these were associated with regional background conditions rather than quarry operations. The EIS predicted that the project would not result in exceedances under typical operating conditions, which is supported by the monitoring data. No exceedances attributable to quarry activities were identified in the reporting period.

6.4 BIODIVERSITY

6.4.1 EIS Predictions

Clearing impacts on native vegetation and habitat, including Koala habitat and Grey-headed flying fox foraging habitat. The impacts were considered significant but offsettable. Overall, predicted no net biodiversity loss avoided through offsets, with long-term neutral or improved outcomes.

6.4.2 Frog Monitoring

Frog monitoring is undertaken in accordance with the Biodiversity and Rehabilitation Management Plan (BRMP), which requires monitoring to be completed following rainfall during the peak breeding season. Three monitoring events were undertaken in January 2025 (attributed to the 2024 Annual Reporting period, and January 2026 and February 2026 following rainfall events. Limited rainfall during Spring and Summer 2025 constrained the timing of monitoring, with suitable conditions for ecologists to complete surveys until early 2026. Monitoring undertaken during the reporting period is considered to meet the intent of the BRMP. Results are provided in **Appendix 4**.

Wedgetail Project Consulting ecologists completed targeted fauna monitoring of the Mahony's Toadlet (*Uperoleia mahonyi*) and Wallum Froglet (*Crinia tinnula*) on 19 January and 16 February 2026. Survey efforts are focused around ephemeral and semi-permanent water bodies using both spotlighting and quiet listening techniques. Each site was surveyed for 20 minutes on two separate occasions. Five amphibian species were detected, and Mahony's Toadlet and Wallum Froglet were not detected at any of the locations in this event.

6.4.3 Fauna Exclusion Fencing

Fauna exclusion fencing has been installed along the edges of the disturbance area prior to and following clearing activities. The exclusion fencing is specified for the purpose of minimising the movement of frogs from wetter areas outside the disturbance area into the disturbance footprint. This movement would be expected to occur in mid- late Autumn, with frogs moving in the opposite direction (i.e. from areas potentially within the disturbance area to wetter areas outside it) in Spring, although outside of the reporting period yet aligned with rainfall monitoring requirements.

Frog exclusion fencing was completed on 9 July 2025.

It was observed that part of the fencing had deteriorated in some areas although outside of the active extraction area. Installation should ideally occur during the period between late spring to early autumn when frogs are most likely outside the works area, installation at other times of year has the potential to be more restrictive, albeit the angled nature of the fence should permit one-way passage. Prior to works being conducted maintenance of the fencing should be completed to limit frogs entering extraction areas.

Koala exclusion fencing was erected in April 2019. The fencing design was amended in consultation with DPHI and koala specialists to be barrier fencing that would slow the movement of koalas, but not preclude koala movement, aiming to minimise koala travel along and around fencing. The fencing has crossing fixtures at approximately 200m intervals. Fauna cameras have been placed along the koala exclusion fencing. Given the fence has been constructed for more than four years it is no longer required, although site will continue to keep fencing erected for biodiversity use.

6.4.4 Fauna Incidents

No fauna incidents occurred during the reporting period. As a result, no changes to current controls in place regarding fauna interactions have been implemented or are proposed as the results suggest they are adequate. They will continue to be monitored and revised if necessary.

6.4.5 Surveillance Cameras

Fauna surveillance cameras installed on the property have been operational for a cumulative total of 22 days during 2025. These cameras are periodically moved around the site and positioned in various locations to assist in the monitoring of the following aspects:

- Feral animals.
- Perimeter fence and koala exclusion / inclusion.
- Frog fence exclusion.

During 2025, the cameras identified numerous feral and native animals. No unauthorised access was observed in this round of monitoring. A copy of the report is found in **Appendix 5**. Fauna identified onsite by these cameras is listed in **Table 15** below.

Table 15: Species Recorded 2025

Native animals		Feral animals	
Common Name	Scientific Name	Common Name	Scientific Name
Swamp Wallaby	<i>Wallabia bicolor</i>	Black Rat	<i>Rattus rattus</i>
Common Brushtail Possum	<i>Trichosurus vulpecula</i>	Feral Cat	<i>Felis catus</i>
Short-beaked Echidna	<i>Tachyglossus aculeatus</i>		
Common Ringtail Possum	<i>Pseudocheirus peregrinus</i>		

6.4.6 Clearing Activities

Pre Clearance Management

The clearing process typically involves the following:

- Confirmation of the area to be cleared and resource boundary.
- Pre-clearance ecological survey of area, including marking of habitat trees and recording of hollows using flagging tape and or spray paint.
- Mulching along inside of resource boundary.
- Erect frog exclusion fencing.
- Where necessary mulching/ mowing of undergrowth to improve access for inspections and visibility of surface.
- Inspection for items of Aboriginal Heritage by Registered Aboriginal Parties (RAPs).
- Survey of the area by radiation specialist to account for unexpected buried radioactive monazite mineral sands left by RZM.
- Nocturnal survey of clearing area the night before clearing.
- Diurnal surveys each morning prior to clearing.
- Clearing of non-habitat trees, leaving habitat trees to stand for two nights prior to clearing.

Clearing activities and associated ecological inspections were undertaken consistent with the Biodiversity and Rehabilitation Management Plan (BRMP), copies of these reports are included in **Appendix 6**. In the reporting period, clearing was undertaken between:

- Sector 8B on 4 and 5 of March 2025
- Sector 10A on 29, 30 July 2025

- Sector 10A, 10B and part of 10C on 23, 24, 25 September 2025

Radiation Surveys

The initial EIS radiation assessment confirmed that background radiation levels across the site remain low and within safe exposure thresholds for both workers and the surrounding community. Additional findings of all sectors support the EIS conclusion that the site does not pose a radiological hazard to site personnel, or the public and routine operations do not require specific radiation management measures. While some survey limitations were noted due to vegetation cover, the survey concluded that radiation levels across the proposed extraction area remain within background levels. However, in accordance with Schedule 3 Condition 46 an effective radiation survey is to be conducted by a suitably qualified and experienced expert, approved by the Secretary, for each area of the sites following vegetation clearing and prior to commencing any other ground disturbing activities. Bartolo Safety Management Service conducted surveys:

- Completed on 5 September 2025 in Section 8 & Part of Sector 10
- Completed on 28 October 2025 in Section 10B and Sector 10C

The results outline no radioactive concentrations or activities that are of any concern for the proposed use of the land/sand. The radiation survey reports are in **Appendix 7**.

6.4.7 Habitat Trees and Nest Box Monitoring

The total number of hollows removed and the number of nestboxes installed to date can be found in **Appendix 8**. On 6, 7 and 8 May 2025, ecologists inspected a total of 183 nest boxes within the onsite Biodiversity Offset Areas. As it stands, there have been 117 hollows removed across the site and a total of 183 nest boxes installed, a surplus of 66 nest boxes of which 7 are requiring maintenance and 1 potentially needing adjustment to being wet.

6.4.8 Pest Survey and Management

During the reporting period, animal footprints, likely wild dogs or foxes but possibly domestic animals from nearby, were observed. Surveillance cameras and monitoring completed by Wedgetail Project Consulting (2025) detected non-native species such as foxes, black rats, rabbits, and horses. NPWS completed a canid trapping program in June 2025 for the Tilligerry State Conservation Area (SCA). Two wild dogs were controlled, and NPWS were restricted

heavily due to lands being inundated by flood water and poor weather shortening their two-week program.

6.4.9 Weed Survey and Control

Newcastle Sand undertake progressive weed management on site using manual removal techniques and herbicide application if necessary. Weed inspections occur on a regular basis and include on-the-spot removal of weeds, as well as identifying areas that require future treatment. Treatment targets common priority weeds and Weeds of National Significance (WoNS). During 2025 weed spraying events occurred and are outlined below.

- Weed control activities were undertaken in May 2025, targeting quarry sectors 3-7. The species treated during this event included *Acacia salinga* (Golden Wreath Wattle) and *Pineu elliottii* (Slash Pine), *Eragrostis sp.* (Love grasses).
- Weed control activities were undertaken on 4 and 5 March 2026, targeting quarry sector 8. The species treated during this event included exotic grasses and broad/flat weeds.

Preclearing surveys did not identify the presence of any large areas of weeds considered noxious or identified on Port Stephen Council's list of 'Priority Weeds' for the LGA within the clearing areas. As such no additional measures are required for topsoil management.

6.4.10 Proposed Improvements

- Weed mapping and monitoring program
- 2026 planting program
- Continue monitoring
- Confirm offsets

6.5 OFFSETS

Newcastle Sand's offset requirements are comprised of two parts:

Schedule 3, Condition 34, Table 4, the retirement of a specified number of credits formed in the creation of a Biodiversity Stewardship Site on the residual portion of the subject land; and Schedule 3, Condition 34, Table 5, retirement of a specified number of credits from an offsite source.

Newcastle Sand have satisfied the offsite portion of biodiversity offset obligations with the purchase and retirement of the required credits. The onsite retirement of credits has been subject to consultation with the Biodiversity Conservation Division within the Department (BCD) and DPHI but has not been resolved owing to the following factors. A stewardship site on the residual areas of the Subject Land may not achieve the requisite number of credits specified in the Condition of Consent, despite being the same spatial area owing to the following issues:

- Changes in methodology mean some credits cannot be created onsite.
- The age of the survey completed during the EIS means a new survey is required at considerable cost purely to justify the creation of credits that would be then retired, changes in survey methodology, calculation and other environmental factors (such as fires and wet weather) may change the number of credits generated.
- Modification 4 has provided consultation with the BCD to review the Biodiversity Offset Strategy to reflect boundary changes and additional credit requirements.
 - Amendment to Condition 34 and Appendix 6 in SSD-6125 relating to the Biodiversity Offset Strategy that reflects the change in boundary of the proposed onsite Stewardship Site and requirement to retire additional credits to offset the impacts of the Western Extension.

The onsite offset area is protected from disturbance and is subject to periodic weed management and restricted access and is therefore currently satisfying the same objective as would be attained by a Stewardship Site. However, longer term it is important that the Total Fund Deposit is established by Newcastle Sand such that the management of the Offset Area (by the landowner) is adequately funded post quarrying activities. Newcastle Sand is working with DPHI and BCD to resolve and update this. Administrative non-compliance associated with finalisation of credit retirement; resolution is being progressed through Modification 4.

6.5.1 Management of Offsets

- Biodiversity Offset Strategy progression.
- Limits on disturbance footprint.
- Habitat protection measures.

6.5.2 Offset Vegetation Clearing

On 2 and 3 January 2025, vegetation occurred within the offset area alongside the drainage channels to assist the surrounding residents. This was completed by Port Stephens Council contractors without knowledge or authorisation from the quarry. This was reported to the Council and DPHI as localised disturbance within the offset area and has been resolved. Biodiversity offset signage and contact numbers continue on the boundary.

6.6 BIODIVERSITY AND REHABILITATION BOND

As per the Annual Review actions from 2024, the DPHI requested that Newcastle Sand update the Biodiversity and Rehabilitation Bond as per Schedule 3 Condition 38 and 39 of SSD-6125. Newcastle Sand has now completed and the DPHI has approved the bond to the amount of \$356,176.

6.7 TRAFFIC MONITORING

6.7.1 EIS Predictions

The EIS for the Newcastle Sand project predicted that, at full production capacity, site traffic would comprise up to 10 laden trucks per hour (equivalent to approximately 20 two-way movements per hour) during standard operating hours, resulting in a maximum of approximately 200 truck movements per day. These traffic volumes were assessed as generating minor to moderate impacts to the local road network, with potential for increased noise, congestion at the site access intersection, and road safety considerations, all of which were predicted to be manageable through the implementation of mitigation measures.

6.7.2 Approved Criteria

Haulage rates remained within approved limits throughout the reporting period. No traffic incidents or complaints were recorded. Traffic impacts are consistent with predictions and effectively managed. The quarry weighbridge system provides for the logging of all sand sales for the quarry. The system has been established and calibrated by an accredited contractor and limits the tickets that can be issued during any one hour to the levels prescribed by the Development Consent criteria. On a monthly basis, a summary of the records is uploaded in the Newcastle Sand internal records and compliance is described on the website, **Table 16** summarises truck movements.

- The maximum truck movement in a day was 109 trucks occurred on 30 September 2025.
- The minimum of 1 truck occurred on 1 February 2025.

Table 16: Laden Truck Movement Criteria and Key Summary

Timing	Trucks Exiting per hour	Trucks Exiting max per day	Annual Maximum Limit	2025 Truck Movements
Mon – Fri 6am – 7am	6	6	Maximum of 34,916	Total of 12,939
Mon – Fri 7am – 5pm	10	110		
Saturday 7am – 4pm	10	90		
<i>Truck movements are under the approved limits and deemed compliant under SSD6125 SoC 8.2 Maximum of 305/365 possible production days.</i>				

6.7.3 Key Environmental Performance

Figure 8 below outlines the daily tally of laden trucks leaving the quarry. As can be seen from the tally, truck movements varied over the year, with demand often project and weather related, as wet weather often leads to a reduced demand for concrete sand with the overall increase in December and no specific trendline.

Newcastle Sand’s truck movements remained generally compliant throughout 2025. However, three instances were recorded where trucks arrived at the site before 6:00am

- 23 November 2025 at 5:34am.
- 8 September 2025 at 5:33am
- 24 November 2025 at 5:34am

A truck entering the quarry gate before 6:00am is not a breach of the consent conditions but is not consistent with the Driver’s Code of Conduct. Actions to amend this through Newcastle Sand involve actively working with haulage contractors to improve driving behaviours through the induction of all drivers and provisions of the Drivers Code of Conduct. Newcastle Sand implements disciplinary action including suspension of materials collection to attempt to limit recurrence. However, it is noted that the ability and perhaps permissibility of Newcastle Sand to control truck driver behaviour outside the bounds of the quarry is limited.

Review of 2025 operational data indicates that actual traffic volumes remained within, and generally below, the EIS predicted maximums. Daily laden truck movements were typically in the range of approximately 30 to 80 trucks per day for much of the year, with higher production periods (notably from September to November) reaching peaks of approximately 100 trucks per day. These peak values remain substantially below the EIS worst-case scenario of approximately 200 daily movements. The data also demonstrates variability in production, with lower traffic volumes observed in mid-year and late December periods, reflecting operational demand rather than sustained maximum throughput. Overall, the 2025 traffic profile is consistent with, and does not exceed, the EIS predictions, confirming that traffic-related impacts remain within the assessed and approved impact envelope.

6.7.4 Management Measures

Newcastle Sand will continue to operate to the requirements of the Development Consent and the Traffic Management Plan.

6.7.5 Proposed Improvements

The Modification 4 approval will include a review and update of the Traffic Management Plan.

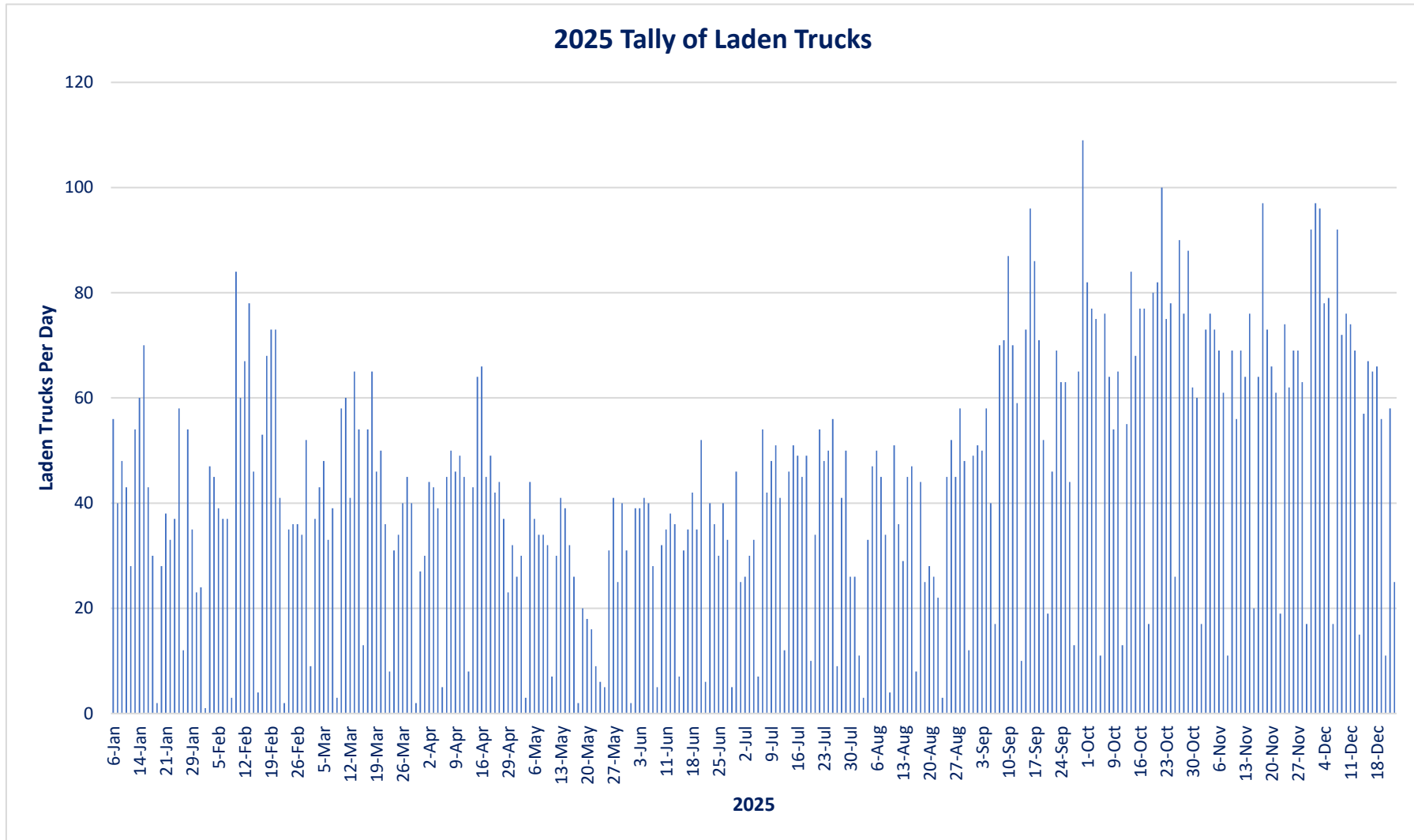


Figure 8: Tally of Daily Laden Trucks

6.8 HERITAGE MANAGEMENT

6.8.1 EIS Predictions

6.8.1.1 Aboriginal Archaeology

Low archaeological sensitivity overall, with some potential for Aboriginal objects. Impacts considered manageable with standard protocols. Overall prediction is negligible to low residual impact.

6.8.1.2 Historic Heritage

The EIS identified no listed historical heritage items within the project area and assessed the potential for impacts to historical heritage as low. Any unexpected finds were considered unlikely and able to be managed through standard heritage protocols.

6.8.2 Key Environmental Performance

6.8.2.1 Aboriginal Heritage

The approved Aboriginal Cultural Heritage Management Plan (ACHMP) provides for the management of cultural material on the site in consultation with the Registered Aboriginal Parties (RAPs). To account for the limited visibility during initial surveys and reduce the risk of destroying in-situ camp sites, the ACHMP provides the following procedure:

- Inspection of the extraction area prior to extraction and prior to topsoil stripping.
- Regular inspection of screen reject material. Screened material was initially stockpiled for inspection but is now laid out on a batter slope to provide improved visibility of the material, with an added benefit of provided batter stabilisation.
- RAPs collect and take offsite, store and then rebury artefacts onsite in nominated areas at end of the quarry life.

It was agreed with RAPs that salvage would be undertaken by surface collection by RAPs first, then using excavator and screen similar to current extraction process, but in smaller stages to better recover all artefacts. RAPs would be present to inspect screens and extraction area as needed. Consultation with the RAPs was undertaken in 2025, with inspections typically aimed to cover the next several areas planned for extraction. The relevant surveys for this period were:

- 10 April 2025

- 5 June 2025
- 7 August 2025

It has been agreed by RAP's that in areas that were subject to past mining, that the inspection of the screened material is generally adequate to recover material, and that the need to recover these artefacts is further reduced if the area is protected from future development.

6.8.2.2 Historic Heritage

No historic heritage items were identified during this period.

6.8.3 Management of Heritage

- Unexpected finds procedure implemented.
- Avoidance where feasible.
- Consultation with relevant stakeholders.

6.8.4 Proposed Improvements

The Modification 4 approval will require a review and update of the Heritage Management Plan.

6.9 WASTE MANAGEMENT AND MINIMISATION

Waste generated onsite was managed in accordance with regulatory requirements. No incidents relating to waste management were recorded. Waste management practices are generally compliant and effective.

Waste is separated at the quarry as follows:

- Drink cans are taken to a Return & Earn facility.
- Cardboard is loaded into a trailer and taken to a recycling facility. Cardboard is not a regular waste stream and is only present where new equipment is ordered.
- Shredded paper is taken offsite and used in mulch or disposed of to the recycling facility.

During the reporting period all general waste was removed from site in 1.5m³ general waste skip bins by Veolia waste services for offsite disposal. Over the period, the bin was collected on average once per week (approximately 50 times), as such it is estimated that a maximum

of 75m³ of general waste was removed from site, noting that the bin is rarely full upon collection.

General waste is varied and rarely of quantities sufficient to justify dedicated bins. General waste will typically consist of crib-room and office waste, weeds and left over frog or sediment fencing waste. Machinery servicing is completed by third party contractors that are required under the service agreement to remove and appropriately recycle or dispose of any waste generated (e.g. oil, oil filters etc). Septic waste was removed from the site by a licenced contractor.

6.10 ENERGY EFFICIENCY

6.10.1 Diesel and Electricity Use

Fuel and electricity usage details are provided in **Table 17**. Electricity usage has remained consistent since the quarry became operational and is currently lower than anticipated within the EIS, however higher diesel usage occurred during the period in comparison to the EIS. The increased diesel usage is due to the need to use haulage trucks and to the variable sand attributes, and usage of a diesel generator as opposed to high voltage mains power. Additional observations include the following:

- Cumulative diesel usage is over double the EIS estimate and increased from 2024.
- Previous years saw a trend of diesel increasing each year since commencement of operations. Overall trend is increasing for diesel consumption.
- Electricity consumption has steadily increased from 2019 to 2024 however has decreased significantly in 2025.
- The quarry also uses an online system 'Plant Assessor' which enables diesel efficient management by providing maintenance scheduling, and real-time tracking of equipment performance and emissions.

Table 17: Fuel and electricity usage for quarry

Year	EIS Estimate		Actual Usage		Comment
	Diesel (L)	Electricity (kWh)	Diesel (L)	Electricity (kWh)	
2025	100,000	189,000*	279,667	10,177	Approved power usage is below the estimated usage and has decreased since 2024. While diesel usage is more than double the estimated usage, and an increase from 2024.

** EIS states, and was approved at 189,000, though may be a potential error and should be 18,900 kWh.*

6.10.2 Opportunities to Improve Energy Efficiency

In 2025 the generator for the wash plant was replaced with a more energy efficient model from a 35L to an 18.5L over a 50% reduction in diesel consumption. Previous years considerable investment on behalf of Newcastle Sand for a new wash plant which has enhanced fuel efficiency by optimising energy use across screening and material handling. Its fuel-efficient engine, powered by a single-point generator with a high-performance hydraulic system, and variable speed conveyors reduce unnecessary diesel consumption. The dual power option allows for electrical operation, cutting fuel costs. Telemetry provides real-time fuel monitoring, enabling better operational control. The machine minimises idle time and fuel and energy wastage, assisting in an environmentally viable solution for quarry operations.

7. WATER MANAGEMENT

7.1.1 EIS Predictions

EIS predictions indicated that impacts to surface water and groundwater would be low and manageable, with minimal runoff due to sandy soils, negligible impact to groundwater levels through maintained separation distances, and no significant deterioration in water quality expected with implementation of standard controls and monitoring.

Water Use

The EIS predicted that water demand for the project would be relatively low and primarily associated with dust suppression, minor processing (screening and later wash plant), and rehabilitation activities. Water supply was expected to be sourced from external licensed sources and managed efficiently, with an emphasis on minimising consumption through reuse and recycling where possible. Overall, the project was not predicted to place significant demand on regional water resources.

Groundwater

The EIS identified the site as being underlain by the highly permeable Tomago Sandbeds aquifer, which is regionally significant. Predicted impacts to groundwater levels and flow were considered minimal due to:

- Shallow extraction depths
- Maintenance of a separation buffer above the groundwater table
- Absence of deep excavation or dewatering activities

Groundwater flow was predicted to remain broadly unchanged (generally south to south-east toward Fullerton Cove), and any localised drawdown or mounding effects were expected to be negligible. The EIS concluded that the project would not adversely impact regional groundwater resources or dependent users, provided extraction limits were maintained.

Surface Water

Due to the high permeability of the sandy soils, the EIS predicted very limited surface water runoff across the site, with most rainfall expected to infiltrate directly into the ground. As a result:

- No significant natural drainage lines would be impacted
- Surface water flows would remain largely unchanged

- Sediment transport risk was considered low but manageable

Potential impacts were primarily associated with construction and disturbed areas, with erosion and sediment controls identified as sufficient to mitigate risks. Overall, the project was predicted to have negligible impact on surrounding surface water systems, including downstream environments such as Fullerton Cove.

PFAS

The EIS acknowledged the presence of PFAS contamination in the broader Williamstown area associated with historical RAAF activities. It predicted that:

- PFAS may be present in groundwater and potentially in site water
- Quarrying activities could interact with PFAS-affected media if not appropriately managed

However, with appropriate controls (e.g. avoidance of groundwater interception, water management systems, and monitoring), the project was not expected to mobilise or exacerbate PFAS contamination. The EIS concluded that risks to human health and the environment would remain low provided management measures and monitoring programs were implemented.

Acid Sulfate Soils (ASS)

The EIS assessed the potential for acid sulfate soils and concluded that:

- The site has a low likelihood of containing significant ASS due to its sandy geological profile
- Extraction above the groundwater table further reduces the risk of acid generation

Accordingly, the project was not expected to generate acid sulfate soil impacts or associated water quality issues. Standard management measures were considered sufficient to address any unforeseen occurrences.

7.1.2 Approved Criteria

Version 5 of the SWMP has been submitted to the DPHI and is under assessment. This update included review of effectiveness, the removal of previous pre-operational data and an update on the water monitoring schedule.

No environmental incidents causing material harm were recorded during the reporting period. No complaints relating to water management were received. The project is considered to be operating in an environmentally acceptable manner with respect to water management.

Monitoring results indicate no material impacts to surrounding water resources and no evidence of non-compliance with approval conditions.

Throughout the reporting period water monitoring data continued to be collected and reviewed against the requirements of the approvals and associated management plan. VGT was engaged to conduct water monitoring on behalf of Newcastle Sand, with the Annual Water Report detailed in **Appendix 9**.

7.2 WATER USE

Water is sourced from the HWC network for all activities onsite or from rainwater captured from building roofs and hardstand areas around the wash plant. Disposal of water from site is limited to disposal of the onsite septic waste that is completed by a licenced third-party contractor. Considerable effort in wash plant design and stockpile areas within the new Wash Plant area have reduced water usage to levels more consistent or lower than original expectations.

During the 2025 reporting period, a total of 23.08 megalitres (ML) of water was sourced from the Hunter Water Corporation (HWC) network for operations onsite. This volume remains below the maximum site limit of 27 ML/year established in the project's Modification 2 documentation, and within the capacity of the local supply network. **Table 18** shows the water usage for 2025 in comparison to the estimates provided within the EIS.

Approximately 26.9 ML attributes to the wash plant water consumption, based on flow meter data, indicating continued reliance on potable water despite the implementation of water efficiency measures. The site will continue to review water conservation strategies in the event of future drought conditions or regional water restrictions, in accordance with the commitments outlined in the SWMP.

Table 18: Water Use Summary 2019-2025 and Water Saving Investigations

Year and works	Forecast Usage	Water Used (HWC Network)	Usage vs Estimate	Water Transferred offsite	Wash Plant	Water Saving Investigations
2025 Operations	29.65 ML	23.08ML	Lower	Septic waste 52kL Based on approx. 22 removal events	26.9 ML	Reduction in water use. Water cart logs capture the amount of dust suppression activities. The water management system, including clean water diversion, sediment controls and closed-loop wash plant operations, is considered effective in minimising off-site impacts.
<i>* Septic waste is disposed on a per tank basis as opposed to an exact volume, each disposal event is 2kL - 4 kL, as such actual disposal is likely to be lower.</i>						

7.3 WATER MONITORING NETWORK

Water monitoring in 2025 was in accordance with the SSD-6125, SWMP and EPL 21264. The network comprises of multiple groundwater bores and surface water sampling points, with monthly, quarterly and annual sampling conducted for both field parameters and laboratory analysis. The water monitoring network is presented in **Figure 9**.

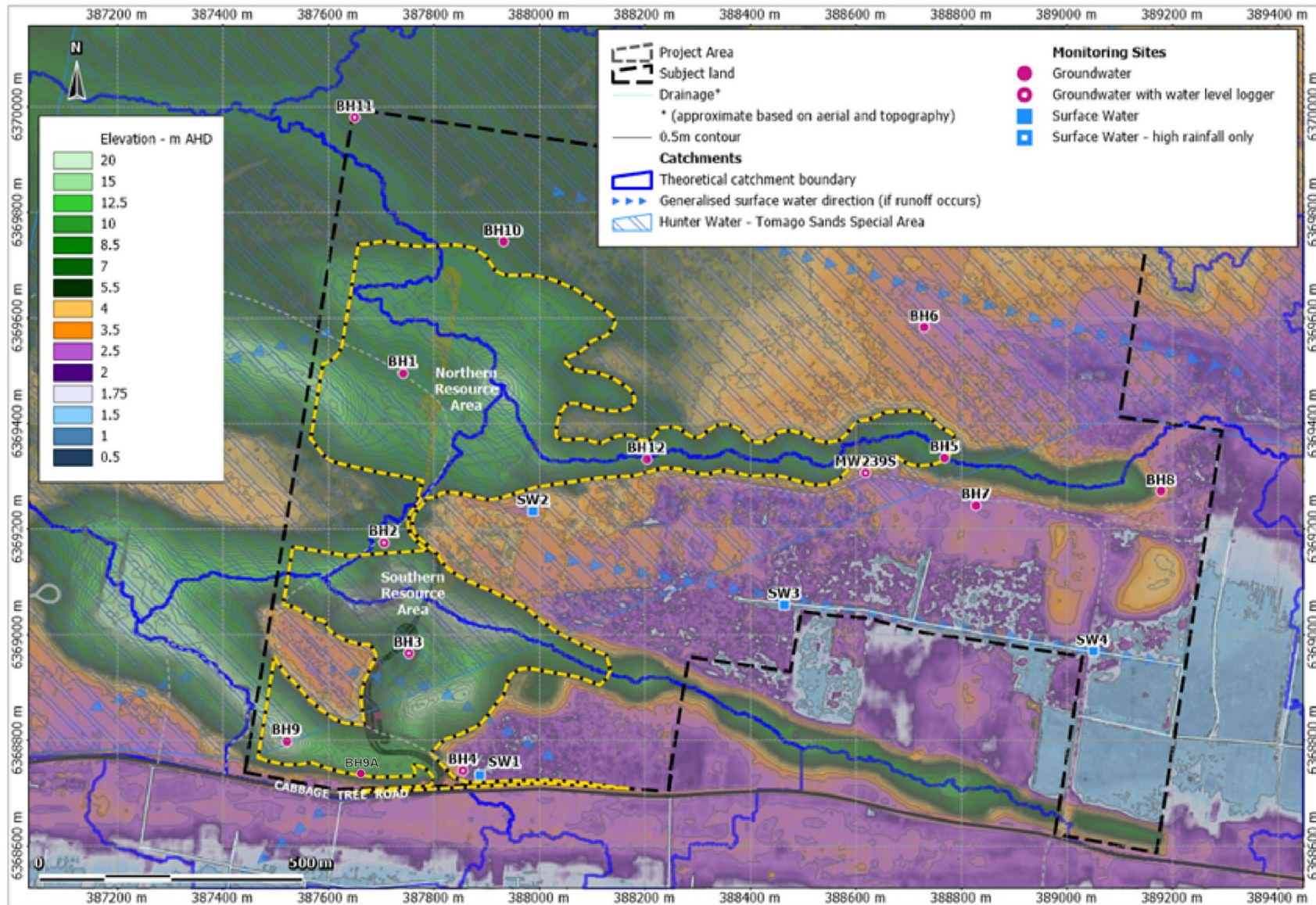


Figure 9: Water monitoring locations and elevation across the Subject Land and surrounds

7.4 WATER LEVELS

Groundwater monthly gauging data is graphically presented in the Annual Water Report (**Appendix 9**). Groundwater levels were monitored and reviewed against the bore monitoring network groundwater levels (Table 3-1) defined in the Maximum Extraction Depth Report (Watershed HydroGeo, 2019) in accordance with Schedule 2 Condition 6 of the consent. The key requirement under the approval is to maintain at least a 0.7 m buffer between the base of extraction and the maximum predicted groundwater level.

Figure 12 outlines the groundwater elevations and trigger levels against the maximum predicted from the Maximum Extraction Depth Management Plan (2019). Groundwater levels are evaluated monthly against the trigger action response plan levels defined within the Maximum Extraction Depth Report including a summary of the groundwater levels against the trigger action response plan (Table 3-3). Results of observations within the 2025 monitoring period include the following:

- TARP Exceedances reflect climatic conditions, not extraction impact.
- Groundwater levels across the monitoring network remained within expected seasonal and historical ranges in 2025.
- Elevated groundwater levels were observed during Q2 / Q3, associated with heavy downpour events and seasonal fluctuations reflecting rainfall patterns. Resulting in the triggered TARP Level 3 response at BH1A, BH2 BH10 and BH11 requiring additional sampling each week until the elevations returned to acceptable levels. A letter was issued to the DPHI documenting groundwater level trends.
- As a result of increased rainfall, as recorded by the Williamstown RAAF weather station (Bureau Station ID # 61078) attributed to groundwater level rise over the 2025 period.
- Extended rainfall events have resulted in significant long-term rising trends for water levels across June to September.
- The required Maximum Extraction Depth Report review with the intent to review the extraction depths and elevation levels including TARPs associated.
- Quarry operations have not negatively impacted the regional water table or resulted in significant drawdown beyond approved thresholds.

Level	Trigger	Action and Response	Report / Response Actions
0	Groundwater levels more than 0.5 m below <i>inferred</i> maximum historical level.	Standard operations – monthly dipping of operational on-site monitoring bores.	N/A
1	Groundwater levels within 0.5 m below <i>inferred</i> maximum historical level at any on-site bore.	Weekly (or more frequent) monitoring (dipping) of groundwater levels until water level declines to below high frequency level bores.	Internal and environmental consultant. Include note in Annual Report.
2	Groundwater levels within 0.25 m of <i>inferred</i> maximum historical level at any on-site bore.	Weekly (or more frequent) monitoring (dipping) of groundwater levels. Re-analysis and review of Minimum Extraction Level (MEL).	WSS to issue letter to DPIE, documenting groundwater level and rainfall trends, review and make recommendations regarding MEL.
3	Groundwater levels within resource area rise above previously <i>inferred</i> maximum groundwater level.	Analysis of recent data by hydrogeologist, including site data and data from local HWC wells and local Defence wells (if available). Revision of MEL. Remediation of earlier excavations to revised MEL if required by DPIE.	WSS to issue letter to DPIE, DoI Water and HWC, documenting groundwater level trends, and revision (if necessary) of MEL. Letter to outline remedial options, considering access, vegetation condition in previously rehabilitated areas. Re-grading of previously rehabilitated areas if required by DPIE.

Figure 10: Groundwater Level Monitoring Tarp Rules (Watershed HydroGeo, 2019)

Table 19: Groundwater Level Evaluation Against TARP Values

Bore ID	Top of Casing (mAHD)	Max. Predicted GW Elevation (mAHD)	2025 Groundwater Elevation (Manual Gauging)		
			Min (m AHD)	Max (m AHD)	Range (m)
BH1A	8.92	4.8	3.56	5.56	2.0
BH2	7.67	3.8	2.54	4.07	1.53
BH4	3.06	3	1.68	2.43	0.75
BH5	7.36	4	1.87	2.76	0.89
BH6	3.62	4.4	2.27	2.93	0.66
BH7	2.98	3.7	1.47	2.41	0.94
BH8	3.88	4	1.63	2.39	0.76
BH9A	10.75	3	1.73	2.73	1.0
BH10	6.71	4.9	3.84	5.51	1.67
BH11	6.64	5.5	4.26	5.19	0.93
BH12A	4.88	4	1.91	3.18	1.27
MW239S	3.04	3.9	0.68	2.78	2.1
MW239D	3.04	3.9	2.07	2.79	0.72

7.5 WATER QUALITY AND DATA TRENDS

Graphical representation of these trends is included in the attached Annual Water Report (VGT, 2026) in **Appendix 9**. Water quality monitoring across groundwater, surface water, and wash plant systems during the 2025 reporting period revealed consistent trends with historical conditions and no long-term signs of degradation or risk to environmental receptors.

Groundwater monitoring results for 2025 indicate that all analysed parameters remained stable across all monitoring bores, with no exceedances of site-specific trigger values for key parameters including dissolved metals (iron, manganese, aluminium), nutrients, and hydrocarbons. PFAS compounds (PFOA, PFHxS, PFOS) were not detected above laboratory reporting limits in any bore samples. Over the reporting period the main exceedances were

groundwater elevation a consequence of extended rainfall periods. A one-off exceedance regarding Barium was identified however follow up sampling showed data back within normal range. The data confirms that the quarrying activities are not adversely impacting groundwater quality, with results aligning closely with baseline conditions in earlier assessments.

Surface water sampling at SW1–SW4 results outline localised variability, particularly in pH consistent with natural acidity and organic-rich sandy soils. While intermittent low pH values were recorded at SW3 and SW4 an occasional exceedance occurred at SW2 (4.1) on the 4 August 2025.

Barium exceeded default guideline value at SW4 but remained within site-specific trigger threshold (0.08). A transient exceedance of hydrocarbons (TRH C16–C34) was detected at SW1 in February, however follow-up sampling in March returned non-detectable levels.

PFAS monitoring in surface water detected trace levels of PFHxS and PFOS (maximum 0.01 µg/L), which were well below relevant ecological and human health thresholds. No heavy metals including lead, cadmium, or chromium exceeded applicable standards. Trace PFAS was detected in select months but all results were below environmental and health trigger values. No exceedances were recorded for dissolved metals in wash water.

7.6 RAINFALL

In 2025, most months experienced above-average rainfall at the Williamtown Airport Bureau Meteorological Station. Significant rainfall occurred most notably in May, when a daily total of 149 mm (23 May 2025), contributing to higher monthly totals that exceeded typical values **Figure 13**. By December, the total annual rainfall for 2025 was approximately 1,722 mm, substantially higher than the long-term annual average of 1,134.4mm for Williamtown, reflecting an unusually wet year compared with historical norms. Long term average temperature, evaporation and rainfall data is available from the Williamtown Airport Bureau of Meteorological Station (ID:061078).

The elevated rainfall in 2025 corresponded with a noticeable rise in groundwater elevations across the monitoring network, particularly following the high rainfall period in May and mid-year. Groundwater levels generally peaked shortly after these significant rainfall events, indicating a strong recharge response within the aquifer system. Levels gradually declined toward late 2025 as rainfall reduced, demonstrating a clear seasonal relationship between rainfall inputs and groundwater elevation. No exceedances were linked to extraction depth or groundwater interaction.

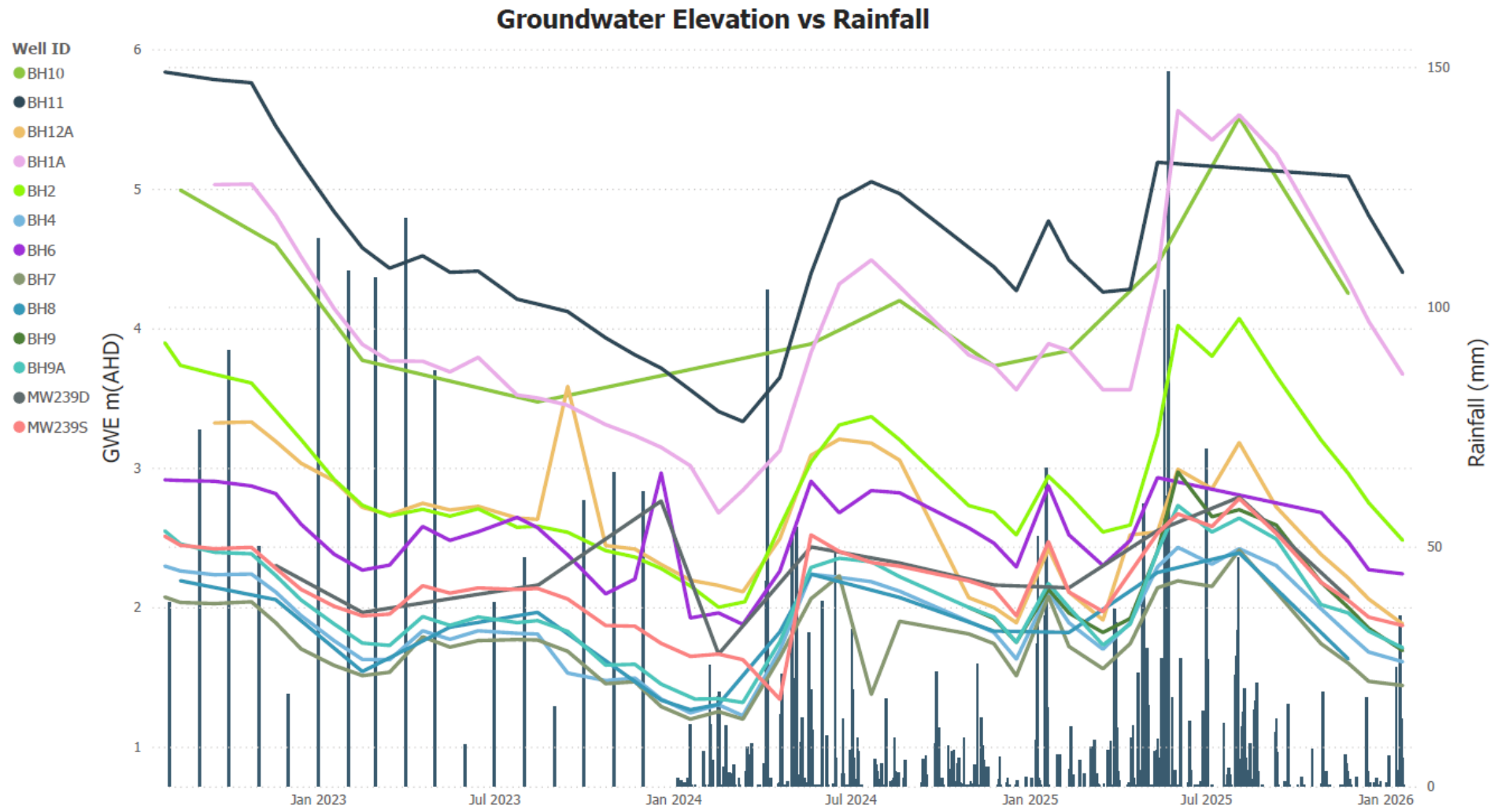


Figure 11: Longterm Groundwater Elevation Levels (m(AHD)) results against Rainfall (mm).

7.7 TRIGGER VALUE EVALUATION

All exceedances were managed in accordance with the SWMP Trigger Response Framework (Section 8.6), with investigations, resampling, and notifications undertaken as required. No exceedances were determined to be attributable to quarry operations.

An exceedance of a trigger value does not necessarily indicate that there is an unacceptable risk on site, but rather a trigger for further investigation or evaluation of management options, as trigger values use baseline data. Monitoring results may naturally exceed trigger values. The selection of the trigger value is based on balancing a highly conservative value that is likely to create unnecessary administration and more relaxed values that may not suitably protect the environment. Each exceedance was assessed against the applicable trigger value as defined in the SWMP in **Table 20** below and observations include the following:

- Metals (Zinc and Barium) exceeded their respective triggers at several boreholes in February and November. No increasing trends were identified, and values were generally consistent with previous monitoring rounds, water trigger investigations are required after two consecutive trigger sampling rounds.
- Hydrocarbon TRH C10 + C16 exceeded the trigger value on one occurrence in February in bore BH9A, additional testing completed and levels were back to range and did not require a water trigger investigation.
- Due to excessive rainfall groundwater elevation exceeded the trigger values on multiple occurrences across June through to October at multiple water bores including BH1A, BH2, BH9, BH9A, BH10, BH11. These exceedances are reflective of seasonal or climatic influences and not necessarily indicative of operational impact.

Table 20: Observation and Trend Summaries and Trigger Evaluation

Analyte	2025 Summary / Observations	Overall Trend	Trigger Value Status	Change Recommended
pH	Generally, within range (4.2–6.5), but occasional low values (min 4.10) at SW2. Wash plant (avg 4.68)	Localised variability, acidic sandy soil	Remains suitable; exceedances intermittent	No
Barium	Generally stable, occasional exceedance at SW4 (0.081 in Nov). Average SW4 (0.055)	Stable overall	Remains suitable; exceedances intermittent	No
Hydrocarbons (TRH)	TRH > C16 -C34 exceedance at SW1 with 140 in Feb. Resample showed non-detectable levels. Average SW1 (68.00).	Stable overall	Within acceptable ranges post-cleanup	No
Barium	Barium exceedance at multiple bores BH1A, BH2, BH12A, BH6. Was a one-off exceedance and values are back within average range.	Stable overall	Remains suitable; exceedances intermittent with no repeat exceedances at any bores.	No
Zinc	Occasional exceedance at BH12A in Nov of 0.150, average 0.06.	Stable overall	Remains suitable; exceedances intermittent	No
Hydrocarbons (TRH)	TRH C10 + C16 exceedance at BH9A in Feb at 260. Average (83.75).	Stable overall	Remains suitable; exceedances intermittent	No
GWE	GWE exceedance at multiple bores including BH1A, BH2, BH9, BH9A, BH10 and BH11 between May and Nov. All now back within average range.	Increasing GWE due to ongoing rainfall events.	Not suitable	Review completed by hydrogeologist. Mod 4 GW model completed.

7.8 PFAS EXPOSURE REVIEW

EIS predictions identified PFAS as a pre-existing regional contamination risk, with the project not expected to introduce new PFAS sources, and impacts limited to potential mobilisation of existing contamination, which would be low and manageable through groundwater separation, water management controls and ongoing monitoring. As required under Schedule 3, Condition 48 of SSD-6125, an independent review was undertaken by Kleinfelder (2026) with a copy of the report in **Appendix 10**. The review is to assess whether quarrying operations increased the risk of PFAS exposure to residents or the environment. The review considered existing PFAS investigations, current site-specific monitoring, and relevant information provided by the Department of Defence (DoD) and NSW EPA. PFAS Migration from RAAF Base within PFAS Risk Zone C (low risk). Migration of PFAS from known sources at the Williamstown RAAF Base is not expected to intersect the site during the quarry's operational life but will be monitored throughout. Overall, the report outlines that:

- No PFAS compounds were detected in any of the 12 surface water samples collected in 2025 and no PFAS compounds were detected above laboratory reporting limits in any groundwater samples.
- 19 TARP level exceedances were recorded throughout the year due to increased rainfall but did not result in groundwater exposure.
- Low-level PFAS compounds (PFOS, PFOA, PFHxS) were detected intermittently in wash plant water and fines. All detections were below site-specific trigger values and human health risk thresholds. Wash plant fines are considered safe for onsite rehabilitation reuse.
- The quarry continues to pose a low and acceptable risk to human health and the environment. Groundwater and surface water monitoring will continue onsite within the WPW and sediment. No further investigation or groundwater modelling is warranted currently.
- Existing dust controls and rehabilitation practices are sufficient to mitigate potential PFAS transport from fines.
- 2025 experienced above-average rainfall between July and September, which elevated groundwater temporarily.

The review confirms that quarrying activities at the site have not increased the risk of PFAS exposure for residents or the environment. PFAS concentrations across all monitored remain below trigger levels, and no evidence of migration pathways from the RAAF Base to the site have been identified. The site is generally compliant with Schedule 3, Condition 48 and the review has been made available to the website in this Annual Review.

7.9 KEY ENVIRONMENTAL PERFORMANCE

Water monitoring is undertaken in accordance with the approved Soil and Water Management Plan (SWMP) required by SSD-6125. Monitoring results indicate that groundwater and surface water quality remain consistent with baseline conditions. Detected PFAS concentrations are consistent with regional contamination and do not indicate a site-derived source. No increasing trends attributable to site activities have been identified. Water management measures are effective, and impacts are within approved limits.

8. REHABILITATION

8.1 EIS PREDICTIONS

Progressive rehabilitation would restore land to a stable, non-polluting condition. Re-establish native vegetation communities. Newcastle Sand's final land use to be aligned with ecological restoration outcomes. Overall prediction is successful rehabilitation, which is achievable, with long-term ecological function restored.

8.2 KEY ENVIRONMENTAL PERFORMANCE

Rehabilitation areas continue to establish in line with expected trajectories. No evidence of erosion or weed dominance was observed. Performance is consistent with approval requirements. Biannual flora monitoring occurred in May and November 2025 and assessed multiple rehabilitation sectors, including new Year 2 blocks (Sector 1A and 2), in line with the approved Biodiversity and Rehabilitation Management Plan (BRMP). Overall, the rehabilitation is progressing well, with most performance criteria being met or partially met with some sectors status declines due to seasonal variation. The program remains on track to meet its long-term ecological goals through continued planting, weed control, and monitoring. Rehabilitation at Newcastle Sand continued during 2025 in accordance with the Biodiversity and Rehabilitation Management Plan (BRMP) and Development Consent requirements.

Rehabilitation is undertaken progressively following extraction, with a focus on minimising the extent of active disturbance and promoting timely vegetation establishment. During the reporting period, topsoil from newly disturbed areas was either directly returned to rehabilitation areas or stockpiled for later use. Rehabilitation activities included topsoil placement, surface preparation, brush matting, and targeted weed management. Vegetation establishment across rehabilitation areas continued to show positive trends, with earlier rehabilitation blocks demonstrating increasing groundcover and structural development, while recently rehabilitated areas remain in early establishment phases.

Temporary stabilisation measures were implemented across disturbed and inactive areas, including erosion and sediment controls, surface roughening, and dust suppression, to minimise erosion risk and support rehabilitation outcomes.

Long-term rehabilitation is progressing in accordance with the approved final landform and land use objectives, which aim to establish a stable, self-sustaining native vegetation community consistent with the surrounding Tomago Sandbeds ecosystem. Monitoring indicates that rehabilitation areas are progressing toward these objectives, with ongoing adaptive management (including supplementary planting and weed control) implemented as required. Further detail on rehabilitation methods, monitoring outcomes, and performance against completion criteria is provided in the 2025 Rehabilitation Report (**Appendix 11**).

8.2.1 Clearing and Rehabilitation Areas

Rehabilitation was undertaken progressively in accordance with approval requirements. Rehabilitation areas are progressing satisfactorily toward completion criteria. The disturbance for 2025 reflects a continued increase in long-term rehabilitation, with rehabilitation across various sectors, including Blocks 1A, 2, 3A–3B, 4A–4B, 5, 5A–5B, 6, 6A–6B, 7, 7A–7C.

The EIS and Development Consent for SSD-6125 predicted that disturbance would be undertaken progressively, with rehabilitation occurring in a staged manner to minimise the extent of active disturbance at any one time. The approved disturbance envelope for the project is approximately 42.31 hectares, with a maximum disturbance footprint of 40.37 hectares anticipated over the next three years; however, it is noted that not all areas would be disturbed concurrently.

As of December 2025, survey data confirms that a total of approximately 31.85 hectares has been disturbed over the life of the project. Of this, approximately 17.8 hectares has been rehabilitated and is currently subject to bi-annual monitoring to assess vegetation establishment and ecosystem recovery. The current active disturbance footprint is approximately 11.42 hectares, consistent with the site's operational staging and representing the maximum area of disturbance at any one time. A further approximately 2.63 hectares is disturbed but not yet rehabilitated, reflecting short-term operational sequencing between extraction and rehabilitation activities.

Overall, the disturbance footprint remains well below the approved disturbance envelope, and the extent of active disturbance is consistent with EIS predictions of progressive rehabilitation. The data demonstrates that rehabilitation is being undertaken in a timely manner following extraction, and that large areas of the site are not left disturbed without treatment. Accordingly, disturbance and rehabilitation activities are considered generally compliant with the Development Consent and consistent with the impact assessment and management framework outlined in the EIS.

Long-term operational areas and temporary stabilisation have been refined following updated delineation of hardstand areas and the movement of temporary topsoil stockpiles. The active extraction and operational area increased slightly due to continued extraction within the east and western sectors (Sectors 8 & 10), but this is expected to decline over the next reporting period as extraction in 2026 will only occur in Sector 9A and 9B, with all additional sectors extraction is complete and progressively rehabilitated.

As shown in the 2025 Rehabilitation Monitoring Report (Wedgetail, 2026) **Appendix 11**. Rehabilitation progress is generally on track with performance criteria, and structural vegetation becoming established across Year 1 and Year 2 sectors.

8.2.2 Rehabilitation Bond

Under Schedule 3, Condition 38 of the consent a rehabilitation bond is to be calculated and verified by a suitably qualified person/s to determine the bond necessary to cover the costs of the implementation of the BRMP for the first three years of quarrying operations at the quarry.

A review of the bond was undertaken in 2025 including a completed calculation of the Biodiversity and Rehabilitation Bond Review which has been submitted to DPHI. On the 16 February 2026 DPHI approved the Biodiversity and Rehabilitation Bond Calculation for an amount of \$356,176 in accordance with Schedule 3 Condition 38 and 39 of the Development Consent.

8.3 MANAGEMENT OF REHABILITATION

- Progressive rehabilitation to minimise exposed areas
- Use of local native species
- Achievement of defined completion criteria
- Additional *E.camfieldii*, a tubestock planting campaign will be conducted in 2025/26 with locally sourced seed and planted across the rehabilitation area based on ecologists recommendation.

9. COMMUNITY

9.1 COMMUNITY OVERVIEW

Refer to Error! Reference source not found. for the locations of receptors surrounding the Project. Dwellings surrounding the subject land comprise of:

- No dwellings located to the north.
- East: closest dwelling is 244 m. 15 dwellings are located within 1 km to the east and north of Cabbage Tree Road.
- South: closest dwelling is 61 m. 29 dwellings are located within 1km to the south and south of Cabbage Tree Road.
- West: closest dwelling is 83 m. 24 dwellings located within 1km to the west and north of Cabbage Tree Road.

Majority of dwellings located below 3 m AHD. The subject land and properties immediately surrounding the area are located within the investigation zone for the RAAF PFAS contamination. It is noted that a low concentration contamination plume extends over only a portion of the site and some residences south and east of the Project.

9.2 COMMUNITY CONSULTATIVE COMMITTEE

Community Consultative Committee (CCC) meetings are typically held four times per year. During 2025, four meetings were held in March, June, September and December. A copy of the meeting minutes is provided on the Newcastle Sand website available at: <https://www.newcastlesand.com.au/community-information/>

Key issues raised at the meetings have related to traffic concerns relating to the actions of haulage operators on the public road. Other issues raised during the meetings included environmental monitoring, quarry operations, and rehabilitation with a particular emphasis in on groundwater and drainage challenges due to elevated water levels in mid to late 2025.

9.3 NEWSLETTERS & OPEN DAYS

While newsletters were not issued during the reporting period, alternative communication mechanisms (including CCC meetings, website updates and direct stakeholder engagement) were maintained. Community information newsletters are typically produced on a regular basis to provide the community with updates or changes that may affect the local community. During 2025, there were little or no changes to the quarry operations that would be expected to affect the local community, as such no newsletters were distributed. Newcastle Sand maintains good communication with many of the neighbouring property owners with residents or owners of the neighbouring properties contacted, some of which are also on the CCC. The minutes of the CCC and presentation are available on the website.

Consultation with immediate neighbours via an annual site open day is required annually. Newcastle Sand does has provided open days, where attendance at previous open days has been limited and community engagement primarily occurring through CCC meetings and direct consultation, this condition is proposed to be removed from commitments in MOD4. The site has significantly reduced its complaints to 1 in 2025. The site regularly formally and informally corresponds with surrounding neighbours through CCC, website and reporting. Both newsletter and open days are essentially superseded by CCC and regular community consultation.

9.4 COMPLAINTS RECORDS

Complaints received by Newcastle Sand are available on the public website. On the 14 November 2025 one complaint was registered in relation to the build-up of sand at quarry entrance. The sand was removed immediately; a site inspection was undertaken to confirm no residual safety risk and preventative measures have been implemented onsite to minimise recurrence. The complaint was reported and closed out by the DPHI on the same day the complaint was reported. The single complaint in 2025 is a decrease from the five complaints received in 2024. The number of complaints has reduced since the commencement of operations, reflecting the increase in the relationship between Newcastle Sands and the community.

9.5 COMPLAINTS SUMMARY

Newcastle Sand recognises the importance of open dialogue with the local community about its operations and the potential impacts of its operation on the local community and environment. Environmental complaints are recorded internally and provided to the public via the Newcastle Sand website, the report form details the nature of the incident and provides feedback on mitigation measures.

Table 21 provides a summary of the total complaints to Newcastle Sand against previous years. The complaints have reduced significantly, with the amount of complaints received equal to Newcastle Sand's construction phase in 2019 when the quarry began.

Table 21: Summary of Complaints 2019-2025

Complaint Type	2019	2020	2021	2022	2023	2024	2025
Dust	1	0	4	0	0	0	0
Noise	1	8	0	2	1	0	0
Traffic	4	4	4	5	6	6	0
Water	0	0	0	0	0	0	0
Other (mainly operating hours & truck movements)	0	11	11	9	0	0	1
Complaints Process	0	0	0	3	1	0	0
Total	6	23	19	19	8	6	1

10. INDEPENDENT ENVIRONMENTAL AUDIT

The most recent Independent Environmental Audit was completed in July 2024 by The APP Group and covered the period from 23 July 2021 to 30 July 2024. Newcastle Sand has completed or is continuing to work through and maintain audit recommendations. The actions currently in progress relate to a modification application and management plan updates that have been ongoing throughout the period. Proposed actions and the status of actions in response to audit recommendations are listed in **Table 22** below and the IEA is available at the Newcastle Sand website: <https://www.newcastlesand.com.au/independent-audits/>

Table 22: IEA Recommendations Summary

Audit Ref	Finding / Recommendation	Newcastle Sand Action	Status / Due Date
NC01	Missed 2021 Maximum Extraction Depth review	Submitted to DPHI Feb 2024; next due 2026	Completed and submitted to the DPHI.
NC02	Truck arrivals before permitted hours	Warnings issued to contractors	Ongoing issue outside the operations control through external contractors, enforcements in action including suspension from site, an update to the TMP required.
NC03	Biodiversity Offset credits not yet retired	In discussion with BCD to finalise offset credits	In progress, BDAR has been completed for the Mod4.
NC04	Outdated BRMP and missing weed/frog fence data	BRMP v4.2 approved Aug 2024; frog fence inspections and weed data now included	Frog fencing installed and weed inspection summaries included in monitoring.
NC05	Plans not reviewed post-audits or reviews	Reviews and updates scheduled; DPHI to be notified	Plans reviewed for update after Annual Review. Updates to SWMP and AQMP updated and submitted to the DPHI. All management plans to be reviewed and

Audit Ref	Finding / Recommendation	Newcastle Sand Action	Status / Due Date
			updated in 2026 post annual review / MOD4.
NC06	Late Annual Reviews (2021, 2022)	All future reviews to be submitted on time	Completed
NC07 & NC08	Annual community open day not held or listed online	Virtual tour and neighbour consultation planned.	Issues with drones and the RAF base. MOD4 to remove SoC commitments.
NC10	Offset credits not finalised	Addressed via NC03	See above
NC12	TARP actions not practical for operations	AQMP being amended to reflect achievable responses	AQMP Update underway.
NC13– NC16	Minor operational or monitoring issues (e.g., radiation survey, PM10 filters)	Repairs completed, monitoring improved	Completed
OFI01	Quarry production data submitted by FY not CY	Consultation with Regulator completed	Resolved
OFI02	2024 Annual Review not on website	Now uploaded as unapproved version pending DPHI approval	Completed

11. INCIDENTS, NON-COMPLIANCES DURING THE MONITORING PERIOD

Non-compliances have been provided in **Table 3** and summarised below in **Table 23**. Non-compliances were reported as they are identified with letters to relevant agencies, identified during the CCC (attended by Council and HWC), within the Annual Return for the EPL, and otherwise through the Annual Review, that is accessible to all agencies at <https://www.newcastlesand.com.au>

- One complaint was received from the community and was immediately rectified.
- No environmental incidents causing material harm occurred during the reporting period.
- Non-compliances are outlined below.
- Environmental exceedances are identified, however, they were
 - Investigated in accordance with relevant approved management plans.
 - Attributed to external or non-project sources.
 - Within expected variability and not indicative of project-related impact

A statement of compliance and a compliance table detailing any non-compliances, incidents and exceedances (**Table 3**) are summarised and reviewed for the purposes of this Annual Review.

Table 23: Summary of Non-Compliances and Environmental Exceedances During the Reporting Period

Approval / Condition / Requirement	Requirement Summary	Non-Compliance / Exceedance	Date / Description / Cause / Justification	Corrective Action / Outcome / Notification / Reporting
Non-Compliances (outlined in Table 3)				
SSD-6125 Schedule 3 Condition 37 BRMP	Frog Monitoring: Two events per year following rainfall during peak breeding season as per BRMP Section 6.4C.	Non Compliance.	2025 period One monitoring event was undertaken in January 2025. Insufficient rainfall during Spring and Summer 2025 meant suitable breeding conditions (i.e. pooling water) did not occur and a second survey could not be undertaken within the reporting period. Monitoring was completed in January and February 2026 following rainfall. No environmental impact identified.	Monitoring completed in early 2026. Ongoing commitment to rainfall-triggered monitoring. Refer to Appendix 4. Reported in Annual Review
SSD6125 Schedule 3 Condition 47	Radiation Survey	Non Compliance.	2025 period The site is required to prepare a radiation survey following vegetation clearing and prior to commencing any other ground disturbing activities. All surveys for each disturbed sector have been completed. Radiation Surveys have been completed in all disturbed areas and have detected no elevations of radiation from 2016-2026.	Resolved. No further action required under MOD2. Sector 9 is scheduled to be completed for radiation survey following vegetation clearing and prior to commencing any other ground disturbing activities. All surveys will have been completed for the site. Modification 4 seeks to amend the timing of this condition to the radiation specialists recommendation. Request for Information provided by the DPHI and closed out / resolved. Reported in Annual Review
SSD-6125 Schedule 5 Condition 4	Management Plan Requirements	Non Compliance	2025 Management Plan reviews completed. Updates required for management plans, yet not finalised in the reporting period. SWMP and AQMP updates have been in consultation with the DPHI.	Plans progressively updated (SWMP submitted, AQMP underway). Full plan review aligned with Mod 4 approval. Reported in Annual Review
SSD-6125 SoC 8.3.12(b)	Access Road	Non Compliance	2025 Access road not sealed – ongoing. Legacy commitment not aligned with current operations. Road maintained, dust controls implemented.	Requirement under review via Mod 4 and reported in Annual Review.

Approval / Condition / Requirement	Requirement Summary	Non-Compliance / Exceedance	Date / Description / Cause / Justification	Corrective Action / Outcome / Notification / Reporting
Exceedances (investigation illustrates these are not non-compliances, rather natural influences external of the quarry)				
SSD-6125 Schedule 3 Condition 7 AQMP Requirements	Air Quality Monitoring	Exceedance 24-hour PM10 criterion	28 August 2025 PM10 HVAS Exceedance. PM10 concentration of 78 µg/m ³ recorded. Investigation completed, data validated significant external earthworks at the time of sampling.	Continued monitoring. DPFI notified. Investigation report completed. Now resolved. Reported in the Annual Review.
SSD-6125 Schedule 3 Condition 7 AQMP Requirements	Air Quality Monitoring	Exceedance 24-hour PM10 criterion	9 October 2025 PM10 HVAS Exceedance. PM10 concentration of 121 µg/m ³ recorded. Investigation completed, data validated significant external earthworks at the time of sampling.	Continued monitoring. DPFI notified. No further enforcement action required.
SSD-6125 Schedule 3 Condition 7 AQMP Requirements	Air Quality Monitoring	Exceedance 24-hour PM10 criterion / Stage 6 TARP	27 November 2025 PM10 Real Time Monitoring Exceedance (RT1). Short-term dust impact. PM10 concentration of 50 µg/m ³ recorded, triggering Stage 6 TARP. Attributed to elevated dust outside operating hours.	Continued real time monitoring. DPFI notified. No further enforcement action required.
SSD-6125 Schedule 3 Condition 15 SWMP Requirements	PFAS Monitoring Investigated Exceedance	Exceedance PFAS trigger values	10 February & 17 March 2025 PFAS concentrations exceeded adopted trigger values. Investigation determined results of the data found an anomaly during QA/QC review. No actual exceedance occurred. Retesting confirmed no exceedance.	Data validation and reanalysis completed. DPFI, EPA and Hunter Water notified and then updated. Investigation completed. No further action required.

Approval / Condition / Requirement	Requirement Summary	Non-Compliance / Exceedance	Date / Description / Cause / Justification	Corrective Action / Outcome / Notification / Reporting
SSD-6125 Schedule 3 Condition 15 SWMP Requirements	Water Monitoring	Exceedance	June / July 2025 Level 3 TARP groundwater levels. Groundwater TARP Exceedance (June/Jul/Aug 2025) Prolonged rainfall elevated groundwater levels at exceeded inferred maximum levels. Extraction depths stayed within compliance. No adverse environmental impact identified.	DPHI notified. Hydrogeological review completed. Additional bores installed for MOD4. To be updated in the SWMP.
<p><i>Note: No material environmental harm incidents occurred during the reporting period. All incidents and non-compliances were managed in accordance with the relevant management plans and regulatory requirements.</i></p>				

12. ACTIVITIES TO BE COMPLETED IN THE NEXT REPORTING PERIOD

The project is considered to be operating in an environmentally acceptable manner. Monitoring results confirm compliance with development consent and EPL requirements, with no evidence of significant environmental impact or deterioration in environmental performance. Results across all environmental aspects indicate that impacts remain within approved limits, with no evidence of significant or cumulative environmental harm.

Actions for the next reporting period include:

- Continue environmental monitoring in accordance with approvals, plans, programs and licences.
- Ongoing review of PFAS trends and exposure pathways.
- Maintenance of erosion and sediment controls.
- Continued progressive rehabilitation.
- Complete active disturbance in Sector 9 and 10.
- Prepare due diligence assessment for final stages of quarry operations.
- Ongoing PFAS monitoring within the wash plant water and sediment and review of PFAS trends and exposure pathways.
- Maintenance of erosion and sediment controls.
- Additional planting program as per ecologists recommendation from monitoring / survey efforts.
- Ongoing weed management with attention to *Acacica saligna* and *Pinus elliotti* in future monitoring events to prevent spread. Weed map showing weeds and densities to in 2026.
- An Independent Environmental Audit was completed and submitted in 2024. Based on the outcomes, management plans are currently being updated. Newcastle Sand will address action items from the audit.
- Continue approval pathway of Modification 4. Prepare for Modification 4 after submission in 2025 to the Development Consent to provide a range of practical updates aimed at ensuring best practice operational practices are consistent with the

development consent to improve efficiencies and redundant conditions or commitments are updated to better reflect current site conditions and operational needs.