

Environmental Management Strategy

Menangle Sand and Soil Quarry

Prepared for Menangle Sand and Soil Pty Ltd
February 2022





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Menangle Sand and Soil Quarry

Environmental Management Strategy

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v2	17 June 2021	P. Towler	P. Towler	Updated to address DPIE comments
v3	25 February 2022	K. Ward	P. Towler	Updated to incorporate MOD2

This report has been prepared in accordance with the brief provided by the client and has relied upon the information collected at the time and under the conditions specified in the report. All findings, conclusions or recommendations contained in the report are based on the aforementioned circumstances. The report is for the use of the client and no responsibility will be taken for its use by other parties. The client may, at its discretion, use the report to inform regulators and the public.

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1 Introduction

1.1 Background

Menangle Sand and Soil Pty Ltd (Menangle Sand and Soil) operates the Menangle Sand and Soil Quarry at 15 Menangle Road, Menangle (Figure 1.1). Quarrying has been undertaken in the location for over 40 years by a number of operators and at varying rates of production. Extraction, processing and rehabilitation activities have been undertaken by Menangle Sand and Soil since 1978.

The quarry, located in the Wollondilly and Campbelltown local government areas, extracts sand and soil along the Nepean River as approved by Development Consent 85/2865, granted by the Minister for Planning on 15 November 1989.

To date, sand and soil has been extracted from Stages 1 to 2 and 4 to 7 (Figure 1.2). While previously approved, sand and soil will not be extracted from Stage 3.

On 10 September 2020, the NSW Land and Environment Court (LEC) approved the Menangle Quarry Extension – Modification 1 (MOD1) to Development Consent 85/2865. Consent Conditions are provided in the Notice of Orders for LEC 2018/342158.

On 5 November 2021, the Minister for Planning and Public Spaces approved the Menangle Quarry Extension – Modification 2 (MOD2). Changes to the Consent conditions are provided in the Notice of Modification for Development Consent DA 85/2865.

The Consolidated Consent ('the Consent') allows the extraction of sand and soil in a new area, the Stage 8 area, that is about 13 ha, and extends about 2 kilometres (km) along the Nepean River south of the Stage 7 area (Figure 1.3). The quarry is approved to extract sand and soil from the Stage 8 area at a rate of up to 150,000 tpa.

The extracted material will be transported to the processing area where it will be stockpiled, processed and blended with materials imported to the site, prior to being dispatched from the quarry. Operations (but not extraction) will continue in the Stage 6 and Stage 7 areas.

Modification 2 removed the requirement for an overland conveyor and replaced it with the operation of an off-road haul truck for the transfer of extracted materials from the Stage 8 area to the processing area using existing roads.

This Environmental Management Strategy (EMS) has been prepared to address the requirements of the Consent.



Source: EMM (2022); DFSI (2017); GA (2011); ASGC (2006)

KEY

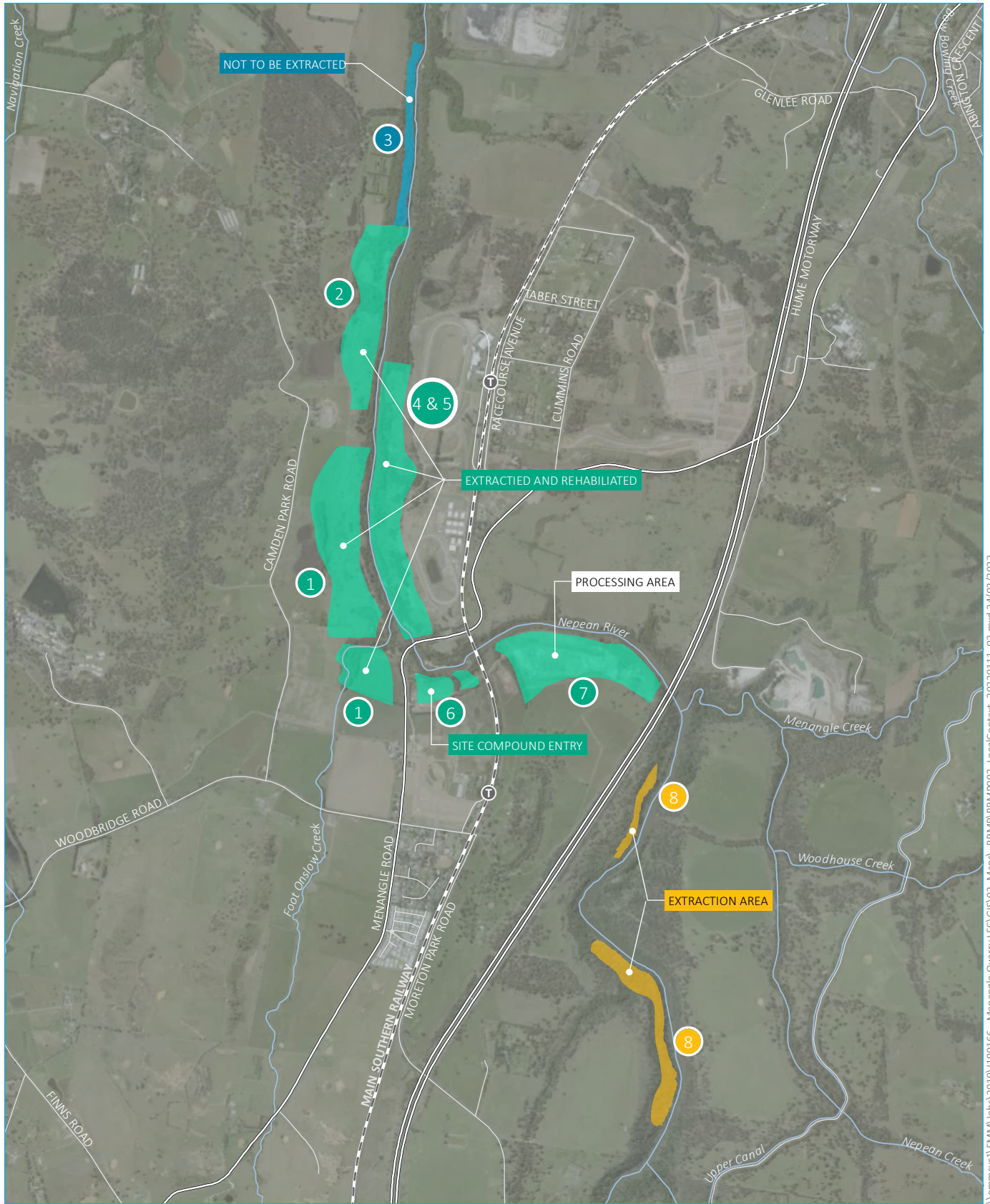
- Rail line
- == Major road
- Named watercourse
- Named waterbody
- NPWS reserve
- Local government area

- INSET KEY**
- Main road
 - State forest

Regional context

Menangle Sand and Soil Quarry
Figure 1.1

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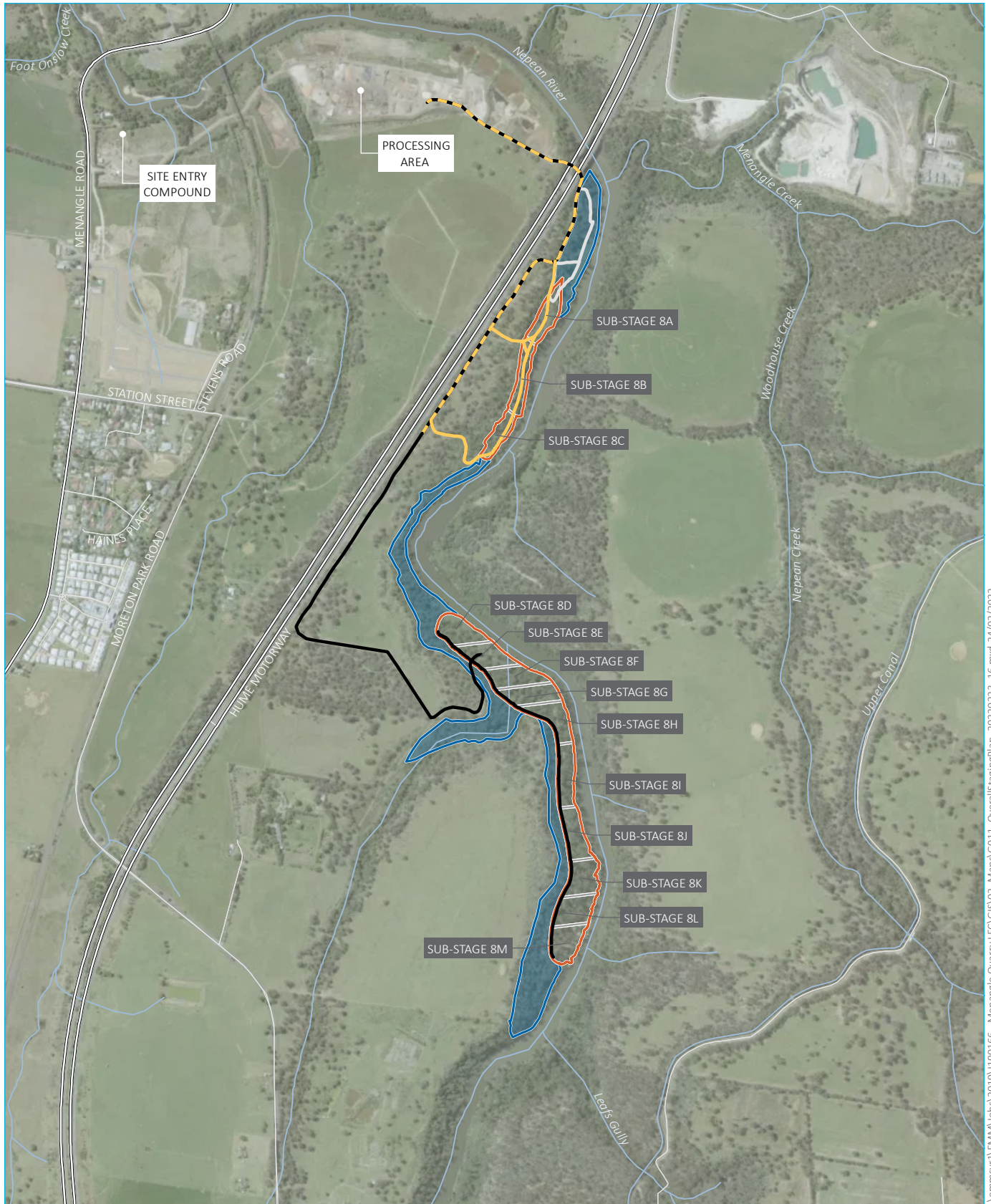


Source: EMM (2022); Metromap (2022); DFSI (2017)

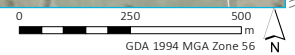
KEY

- Train station
- Rail line
- Main road
- Local road
- Named watercourse
- Extractive operations (approved)
- Extractive operations (approved but not extracted)
- Stage 8 - extraction/rehabilitation area

Menangle Quarry stages 1 to 8



Source: EMM (2022); Metromap (2022); DFSI (2017)



KEY

- | | | |
|--|----------------|----------------------------|
| Stage 8 - extraction/rehabilitation area | Access track | Substage boundary |
| Stage 8 - restoration area (no extraction) | Haul roads | Phase 1 Sub-stages 8A - 8B |
| Main road | Substage 8A-8M | Phase 2 Sub-stage 8C |
| Local road | Substage 8A-8C | Phase 3 Sub-stages 8D - 8E |
| Watercourse/drainage line | Substage 8D-8M | Phase 4 Sub-stages 8F - 8G |
| | | Phase 5 Sub-stages 8H - 8I |
| | | Phase 6 Sub-stages 8J - 8K |
| | | Phase 7 Sub-stages 8L - 8M |

Stage 8 area

Menangle Sand and Soil Quarry
Figure 1.3



\\emmsvr1\EMM\Jobs\2019\1190166 - Menangle Quarry\EC\GIS\02_Maps\G011_OverallStagingPlan_20220223_16.mxd 24/02/2022

1.2 Project overview

The quarry has consent to extract the sand and soil resource in the Stage 8 area to 2035. Stage 8 has been split up into 15 sub-stages (Figure 1.3) which have been further categorised into seven extraction phases (Table 1.1).

Table 1.1 Stage 8 phases

Phase	Substage
1	8A–8B
2	8C
3	8D–8E
4	8F–8G
5	8H–8I
6	8J–8K
7	8L–8M

As well as the extraction areas, key components of the quarry include:

- a wheel wash and weighbridge;
- a site office and amenity building;
- a workshop west of the site office;
- fuel supply tanks north of the storage shed;
- processing area, including stockpiles; and
- other minor infrastructure.

These components will be used to support activities in the Stage 8 area which include:

- extraction in the Stage 8 extraction area followed by rehabilitation;
- restoration of areas adjacent to the extraction areas; and
- internal haul roads.

1.3 Operations

1.3.1 Activities

Operations at the quarry comprise of the following activities:

- vegetation management and clearance;
- sand and soil excavation;
- material transport by off-road haul truck;

- sorting and screening of excavated material;
- processing of excavated material;
- blending of excavated material with imported materials (permitted by the Consent and EPL 3991);
- stockpiling;
- loading of product into trucks; and
- product dispatch via trucks.

1.3.2 Plant and equipment

Condition A33 of the development consent states:

All plant and equipment used on site, or to monitor the performance of the development must be:

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

Regular maintenance of all plant and equipment will be logged and stored on site available for review at any time.

1.4 Quarry life

The Stage 8 Operations may be carried out on the site until 31 December 2035.

1.5 Operating hours

The quarry will operate during the approved hours in accordance with development consent Table 1, Condition A26 (see Table 2.1 below).

Table 1.2 Operating hours

Activity	Permissible hours
Construction work	<ul style="list-style-type: none"> • 7 am to 5 pm Monday to Friday • 7 am to 1 pm Saturday • At no time on Sundays or public holidays
Quarrying operations including loading and dispatch of laden trucks	<ul style="list-style-type: none"> • 6 am to 5 pm Monday to Friday • 6 am to 12 noon Saturday • At no time on Sundays or public holidays
Maintenance, security, office work, cleaning, etc	<ul style="list-style-type: none"> • May be conducted at any time, provided that these activities are not audible at any residence on privately-owned land

Condition A27 of the development consent states that where police or other public authorities request that deliveries or dispatching of materials are to be carried out outside operating hours and emergency work to avoid the loss of lives, property or to prevent environmental harm is required, then these activities are permitted outside the normal operating hours. In such circumstances, the Applicant must notify the Department and affected residents prior to undertaking the activities, or as soon as is practical thereafter.

1.6 Access

1.6.1 Site access

The main access to the site is from Menangle Road. Menangle Road is an arterial road which provides sub-regional access.

1.6.2 Access to the Stage 8 area

The existing access under the Hume Motorway was retained when the Road Transport Authority (now Transport for NSW, TfNSW) bisected the lands when acquiring the corridor for the original Hume Highway in 1969. The existing access road under the bridge will be sealed and will comply with TfNSW drainage and pavements standards.

Material will be transported beneath the Hume Motorway Menangle Bridge by off-road haul truck using existing tracks.

The earthmoving equipment, off-road haul truck and other plant to service the Stage 8 area may also access the area via Moreton Park Road. Major plant is expected to remain onsite through-out the duration of the quarrying operations except for major servicing or replacement.

1.6.3 Product dispatch

Truck movements at the site (ie combined inbound and outbound movements) will not exceed an average of:

- 147 per day on Monday to Friday; and
- 80 per day on Saturday.

1.7 Document purpose

The purpose of this EMS is to provide a structured approach to the management of environmental issues during the operation of the quarry by:

- describing the project and activities to be undertaken;
- describing the strategic framework for environmental management of the quarry;
- identifying the approvals, licences and permits that relate to the quarry;
- describing the roles and responsibilities of personnel in relation to environmental management;
- describing the procedures that will be implemented for community consultation and notification, and complaints management;
- outlining a monitoring regime for construction.

This EMS has been prepared by EMM Consulting Pty Limited (EMM) on behalf of Menangle Sand and Soil.

Menangle Sand and Soil will not commence quarrying operations in the Stage 8 Area until this EMS is approved by the Planning Secretary.

The EMS, as approved by the Planning Secretary, will be implemented.

1.8 Consultation

1.8.1 EMS preparation

i Consultation requirements

In accordance with the conditions of the Consent, several management plans require consultation with NSW regulators, stakeholders and councils. A consultation and approval matrix, showing the satisfaction ‘S’ and consultation ‘C’ requirements is provided in Table 1.3.

Table 1.3 Consultation required for the management plans

Document	Condition or requirement	Timing of document	Dept of Planning, Industry & Environment	NSW Environment Protection Authority	Department of Planning, Industry & Environment - Water	NSW Heritage	Relevant Registered Aboriginal Parties	Biodiversity Conservation Division (BCD) of DPIE	Wollondilly Shire Council	Campbelltown City Council	Transport for NSW
Environmental Management Strategy	D1	Prepared prior to quarrying operations in the Stage 8 Area	S								
Native Vegetation Identification Report (NVIR)	A11	Prior to Early works commencing	S								
Early Works Construction Environmental Management Plan ¹	B1	Prior to quarrying operations in Area 8	S								
Noise Management Plan (NMP)	B7; B7 (b)	Prior to quarrying operations	S	C							
Air Quality Management Plan (AQMP)	B14; B14 (b)	Prior to quarrying operations in Area 8	S	C							
Flood Management Plan	B32	Prior to quarrying operations in Area 8	S								
Soil and Water Management Plan (SWMP), including:	B36; B36 (b)	Prior to quarrying operations in Area 8	S	C	C						
• Surface Water Management Plan	B36; B36 (c) (ii)	Prior to quarrying operations in Area 8	S	C	C						
• Groundwater Management Plan	B36; B36 (c) (iii)	Prior to quarrying operations in Area 8	S	C	C						
Ephemeral Creek Management Plan ²	B40	Prior to quarrying operations in Area 8E, 8F or 8G	S								

Table 1.3 Consultation required for the management plans

Document	Condition or requirement	Timing of document	Dept of Planning, Industry & Environment	NSW Environment Protection Authority	Department of Planning, Industry & Environment - Water	NSW Heritage	Relevant Registered Aboriginal Parties	Biodiversity Conservation Division (BCD) of DPIE	Wollondilly Shire Council	Campbelltown City Council	Transport for NSW
Traffic Management Plan (TMP)	B55; B55 (b)	Prior to quarrying operations in Area 8	S						C	C	C
Aboriginal Cultural Heritage Management Plan (ACHMP)	B62; B62 (b)	Prior to quarrying operations in Area 8	S			C	C				
Biodiversity and Rehabilitation Management Plan (BRMP), including:	B73; B73 (b)	Prior to quarrying operations in Area 8	S					C	C		
• Biodiversity Offset Strategy	B67; B68; B69	Prior to quarrying operations in Area 8. Subset to BRMP	S								
Linear infrastructure impact assessment report	B65; B66	Prior to construction of linear infrastructure (including access roads and haul roads)	S								
Vegetation Management Plan (stages 6 and 7) [included within the BRMP].	B80; B81; B82	By the end of December 2020, or other timing as agreed.	S								

S – Satisfaction; C – Consultation.

1. At this stage, it is not proposed to prepare an early works management plan.
2. Plan to be prepared at a later date.

ii Environmental management plans author endorsement

The environmental management plans (EMPs) were prepared by EMM. The Consent requires that the authors of some of these plans were endorsed by DPIE (Table 1.4).

Table 1.4 **Endorsement of experts**

Document	Relevant condition	Appointed person
Native Vegetation Identification Report(s)	A10(b)(i) of Schedule 2	Dr Steven Ward
Ephemeral Creek Management Plan	B40(a) of Schedule 2	Chris Kuczera
Traffic Management Plan	B55(a) of Schedule 2	Abdullah Uddin
Aboriginal Cultural Heritage Management Plan	B62(a) of Schedule 2	Ryan Desic

The DPIE endorsement letter is provided in Appendix B.

The EMS and relevant management plans (as required by the Consent) have been submitted to DPIE for confirmation that the document has been prepared to the satisfaction of the Secretary. Updated plans will be submitted to DPIE in accordance with Condition D5 of Schedule 2.

Menangle Sand and Soil will be responsible for the implementation of this EMS and the EMPs.

iii **Consultation outcomes**

Consultation was undertaken in two phases during the original preparation of this plan:

1. a letter was sent to each of the relevant agencies in October 2020, introducing the project and requesting any input relevant to the preparation of the plan; and
2. the draft plan was sent to the relevant agencies requesting comments on the plan.

Consultation undertaken for each specific plan is described within the relevant plan, with correspondence appended.

Following DPIE's review of the draft EMS, the final EMS (version 2, 17 June 2021) was approved by the Planning Secretary on 21 June 2021 (Appendix C).

1.8.2 EMS update

Agencies were consulted during the MOD2 application process. Their comments were considered by Menangle Sand and Soil during the application process and by DPIE on behalf of the Minister in approving the application and amending the Consent conditions.

Menangle Sand and Soil will enter into an agreement with TfNSW for the operation and ongoing maintenance of the section of the haul road and associated infrastructure within the Hume Highway Road Reserve (including under the Menangle Bridges) prior to any construction within the road reserve.

1.8.3 Notification of commencement

Menangle Sand and Soil will notify DPIE in writing at least two weeks before the date that any of the follow commence:

- a) construction activities associated with Stage 8 Operations;

- b) quarrying operations in each of Phases 1 to 7;
- c) cessation of quarrying operations (ie quarry closure); and
- d) any period of suspension of Quarrying Operations (ie care and maintenance).

2 Compliance requirements

2.1 Legislative requirements

The key legislation applicable to the operation of the quarry is listed in Table 2.1.

Table 2.1 Key legislation

Legislation	Requirements
<i>Environmental Planning and Assessment Act 1979</i>	
Development approval	<p>In September 2020, the NSW Land and Environment Court (LEC) approved the Menangle Quarry Extension – Modification 1 (MOD1) to Development Consent 85/2865.</p> <p>In November 2021 approved the Menangle Quarry Extension Modification 2 (MOD2).</p> <p>Consent conditions are provided in the Consent. The quarry will operate in accordance with these conditions.</p>
<i>Protection of the Environment Operations Act 1997 (POEO Act)</i>	
Environment Protection Licence (EPL)	<p>The quarry’s Environment Protection Licence (EPL 3991) lists the following scheduled activities:</p> <ul style="list-style-type: none">• Crushing, grinding or separating;• Land-based extractive activity; and• Recovery of general waste. <p>The EPL has been varied to include the Stage 8 area.</p>
Pollution Incident Response Management Plan (PIRMP)	<p>A PIRMP has been developed for the quarry in accordance with the requirements in Part 5.7A of the POEO Act and the POEO Regulations.</p>
<i>Water Management Act 2000 and/or Water Act 1912</i>	
Water Access Licences (WALs)	<p>The quarry holds licences to extract surface water from the Hawksbury and Lower Nepean Rivers Water Source:</p> <ul style="list-style-type: none">• 26953;• 26981;• 26889;• 26377;• 27027; and• 27010. <p>On the basis of groundwater monitoring at the quarry and a numerical groundwater model, it is predicted that up to 0.7 ML/year of water may enter the extraction area. As this is less than 3 ML/year, it qualifies for a licence exemption (see the SWMP for details).</p>
Controlled Activity Approval	<p>Controlled activity approval (CAA-2021-11223) for the extraction of sand and soil from the Stage 8 area adjacent to the Nepean River.</p>

Table 2.1 Key legislation

Legislation	Requirements
<i>National Parks and Wildlife Act 1974</i>	
Aboriginal Heritage Impact Permit	<p>Consent Condition B61(b) requires that an Aboriginal Heritage Impact Permit is obtained under section 90 of the National Parks and Wildlife Act, and the Aboriginal Cultural Heritage Management Plan is revised to include appropriate measures in respect the Aboriginal object or Aboriginal place, to the satisfaction of the Planning Secretary.</p> <p>See the AHMP for details.</p>
<i>Biodiversity Conservation Act 2016</i>	
Biodiversity offsets for approved vegetation clearance	<p>Consent Condition B68 requires that biodiversity offsets are provided for the approved vegetation clearance and if the approved Restoration Area does not meet the requirements of the Consent, the relevant deficiency in biodiversity credits must be retired in accordance with the Biodiversity Offsets Scheme of the BC Act, to the satisfaction of the NSW Biodiversity Conservation Trust.</p> <p>See the BRMP for details.</p>
Biodiversity offsets for linear infrastructure	<p>Consent Condition B65 requires that vegetation must be mapped and biodiversity credits calculated for proposed clearing of any vegetation for the construction of linear infrastructure. Consent Condition B66 requires that the required credits are retired in accordance with the Biodiversity Conservation Act.</p> <p>Consent Condition B68 requires that a trust is established for the management of the biodiversity offsets, that is calculated in accordance with the total fund deposit requirements for a biodiversity stewardship site in accordance with the Biodiversity Conservation Act.</p> <p>Existing access tracks as haul roads will be used so no vegetation will need to be cleared for the installation of linear infrastructure.</p> <p>See the BRMP for details.</p>
<i>Conveyancing Act 1919</i>	
Protection of biodiversity offsets	<p>Condition B69 requires that a positive covenant is established on title to protect the Restoration Area.</p> <p>See the BRMP for details.</p>
<i>Heritage Act 1997</i>	
Heritage items	<p>Consent Condition B58 requires that the development does not cause any direct or indirect impact on any identified heritage item (as defined within the Consent) located outside the approved disturbance area.</p>
<i>Roads Act 1993</i>	
Consent under Section 138 of the Roads Act	<p>Consent under Section 138 of the Roads Act is required for construction work within the Hume Highway Road Reserve, including beneath the Hume Motorway Menangle Bridges as per Consent Condition B48.</p>

2.2 Consent conditions

The approval conditions are provided in the Notice of Orders for LEC 2018/342158 . The approval conditions applicable to this EMS, and where they are addressed within the EMS, are summarised in Table 2.2.

Table 2.2 Conditions relevant to the EMS

Condition	Requirement	Where addressed
PART D	ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING	
	ENVIRONMENTAL MANAGEMENT	
	Environmental Management Strategy	
D1	An Environmental Management Strategy must be prepared for the development to the satisfaction of the Planning Secretary. This strategy must:	
	(a) provide the strategic framework for environmental management of the development;	Section 3.1.3
	(b) identify the statutory approvals that apply to the development;	Chapter 2
	(c) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Section 3.2
	(d) set out the procedures to be implemented to:	
	(i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;	Section 5.1.2i Section 9.3
	(ii) receive record, handle and respond to complaints;	Section 5.2
	(iii) resolve any disputes that may arise during the course of the development;	Section 5.3
	(iv) respond to any non-compliance and any incident;	Section 8.2.2 Section 8.3.2
	(v) respond to emergencies; and	Section 8.1
	(e) include:	
	(i) references to any strategies, plans and programs approved under the conditions of this consent; and	Table 9.1
	(ii) a clear plan depicting all the monitoring to be carried out under the conditions of this consent.	Section 6.2
D2	The Applicant must not commence Quarrying Operations in the Stage 8 Area until the Environmental Management Strategy is approved by the Planning Secretary.	Section 1.7
D3	The Applicant must implement the Environmental Management Strategy as approved by the Planning Secretary.	Section 1.7
	Management Plan Requirements	
D4	Management plans required under this Schedule must be prepared in accordance with relevant guidelines, and include:	EMPs
	(a) a summary of relevant background or baseline data;	EMPs
	(b) details of:	
	(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);	EMPs
	(ii) any relevant limits or performance measures and criteria; and	EMPs
	(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	EMPs

Table 2.2 Conditions relevant to the EMS

Condition	Requirement	Where addressed
(c)	a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	EMPs
(d)	a program to monitor and report on the:	
(i)	impacts and environmental performance of the development; and	Section 6.2 Section 7 Section 8.3.2 EMPs
(ii)	effectiveness of the management measures set out pursuant to condition D4(c);	EMPs
(e)	a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	EMPs
(f)	a program to investigate and implement ways to improve the environmental performance of the development over time;	Section 9.2.3 EMPs
(g)	a protocol for managing and reporting any:	
(i)	incident, non-compliance or exceedance of the impact assessment criteria or performance criteria;	Chapter 8 EMPs
(ii)	complaint; or	Section 5.2 EMPs
(iii)	failure to comply with statutory requirements; and	Section 8.2 Section 8.3 EMPs
(h)	a protocol for periodic review of the plan.	Section 9.1 EMPs
<i>Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i>		

REVISION OF STRATEGIES, PLANS AND PROGRAMS

D5	Within three months of:	
(a)	the submission of an incident report under condition D7;	Section 9.2.2
(b)	the submission of an Annual Review under condition D9; and	Section 9.2.2
(c)	the submission of an Independent Environmental Audit under condition D11;	Section 9.2.2
(d)	the approval of any modification to the conditions of this consent; or	Section 9.2.2
(e)	the issue of a direction of the Planning Secretary under condition A8 which requires a review, the suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.	Section 9.2.1 Section 9.2.2
D6	If necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary and submitted to the Planning Secretary for approval within six weeks of the review.	Section 9.2.2

Table 2.2 Conditions relevant to the EMS

Condition	Requirement	Where addressed
	<i>Note: This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.</i>	
REPORTING AND AUDITING		
Incident Notification		
D7	The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing <u>via the Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.</u>	Section 8.3.2i
Non-Compliance Notification		
D8	Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance. <i>Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</i>	Section 8.2.2
Annual Review		
D9	By the end of March in each year after the commencement of Quarrying Operations in the Stage 8 Area, or other timeframe agreed by the Planning Secretary, a report must be submitted to the Department reviewing the environmental performance of the development, to the satisfaction of the Planning Secretary. This review must:	Section 7.2
(a)	describe the development (including any 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;	Section 7.2
(b)	include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, including a comparison of these results against the:	Section 7.2
(i)	relevant statutory requirements, limits or performance measures/criteria;	Section 7.2
(ii)	requirements of any plan or program required under this consent;	Section 7.2
(iii)	monitoring results of previous years; and	Section 7.2
(iv)	relevant predictions in the documents listed condition A7(c).	Section 7.2
(c)	identify any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;	Section 7.2
(d)	evaluate and report on:	
(i)	the effectiveness of the noise and air quality management systems; and	Section 7.2
(ii)	compliance with the performance measures, criteria and operating conditions in this consent, as they relate to the Stage 8 Area;	Section 7.2

Table 2.2 Conditions relevant to the EMS

Condition	Requirement	Where addressed
(e)	identify any trends in the monitoring data over the life of the development;	Section 7.2
(f)	identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and	Section 7.2
(g)	describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.	Section 7.2
D10	Copies of the Annual Review must be submitted to Council and made available to any interested person upon request.	Section 7.2
Independent Environmental Audit		
D11	Within one year of the commencement of Quarrying Operations in the Stage 8 Area, and every three years after, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. The audit must:	Section 6.3.2
(a)	be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;	Section 6.3.2
(b)	be carried out in consultation with the relevant agencies;	Section 6.3.2
(c)	assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent, water licences and mining leases for the development (including any assessment, strategy, plan or program required under these approvals);	Section 6.3.2
(d)	review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this consent;	Section 6.3.2
(e)	recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under the abovementioned approvals and this consent; and	Section 6.3.2
(f)	be conducted and reported to the satisfaction of the Planning Secretary.	Section 6.3.2
D12	Within three months of commencing an Independent Environmental Audit, or within another timeframe agreed by the Planning Secretary, the Applicant must submit a copy of the audit report to the Planning Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Planning Secretary. <i>Note: The audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Planning Secretary.</i>	Section 6.3.2
Monitoring and Environmental Audits		
D13	Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit. <i>Note: For the purposes of this condition, as set out in the EP&A Act, “monitoring” is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an “environmental audit” is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.</i>	

Table 2.2 Conditions relevant to the EMS

Condition	Requirement	Where addressed
D14	Noise and air quality monitoring under Part B of this Schedule is not required at all privately-owned residences and the use of representative monitoring locations can be used to demonstrate compliance with criteria.	NMP AQMP
ACCESS TO INFORMATION		
D15	Prior to commencing Quarrying Operations in the Stage 8 Area, the Applicant must:	Section 9.3 Table 9.1
(a)	make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website:	Section 9.3 Table 9.1
(i)	the document/s listed in condition A7 (c);	Section 9.3 Table 9.1
(ii)	all current statutory approvals for the development;	Section 9.3 Table 9.1
(iii)	all approved strategies, plans and programs required under the conditions of this consent;	Section 9.3 Table 9.1
(iv)	regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;	Section 9.3 Table 9.1
(v)	a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;	Section 9.3 Table 9.1
(vi)	a summary of the current stage and progress of the development;	Section 9.3 Table 9.1
(vii)	contact details to enquire about the development or to make a complaint;	Section 9.3 Table 9.1
(viii)	a complaints register, updated monthly;	Section 9.3 Table 9.1
(ix)	the Annual Reviews of the development;	Section 9.3 Table 9.1
(x)	audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant's response to the recommendations in any audit report;	Section 9.3 Table 9.1
(xi)	any other matter required by the Planning Secretary; and	
(b)	keep such information up to date for the life of the development and to the satisfaction of the Planning Secretary.	Section 9.3

2.3 Compliance policies, standards and guidelines

Environmental management will be undertaken in accordance with the policies, standards and guidelines listed in each of the EMPs.

3 Environmental management

3.1 Environmental management framework

The environmental management framework has been designed to comply with the requirements of ISO 14001 Environmental Management Systems. The EMS comprises relevant sections from Menangle Sand and Soil’s Management System, the overarching EMS (this document), and a number of issue-specific EMPs that detail environmental management at the quarry.

3.1.1 Environment Policy

The quarry operates under Benedict Industries Environment Policy (provided in Appendix D). The policy describes Menangle Sand and Soil’s commitment to environmental performance and compliance with legislative and regulatory requirements.

The Environment Policy is displayed on the quarry’s website and is communicated to staff and contractors via inductions and ongoing awareness programs.

3.1.2 Objectives and targets

As a means of assessing environmental performance, environmental objectives and targets have been developed in consideration of the key issues identified through the approval process. The objectives and targets are consistent with Benedict Industries Environment Policy and will assist in determining whether the commitments of the policy are being met.

Environmental objectives for the quarrying activities are provided in Table 3.1.

Table 3.1 Objectives and targets

Objective	Target	How monitored and measured
Comply with all legislative requirements	<ul style="list-style-type: none">• Full compliance with statutory approvals.	Audits, compliance reporting and tracking, inspections, and monitoring.
Operate the quarry in accordance with the approval any other legal requirements	<ul style="list-style-type: none">• No regulatory infringements (penalty infringement notices or prosecutions).• No formal regulatory warning.	Audits, compliance reports, inspections, and monitoring.
Engage with stakeholders and the broader community, minimise complaints and respond to any complaints within a suitable timeframe	<ul style="list-style-type: none">• Disseminate regular site updates and other information to keep the community informed of the quarry activities.• Record and respond to complaints within a timely manner.• Provide access to quarry information and documents through the quarry’s website.	Review Complaints Register and timeliness of response, compliance reporting and tracking, audits.

Table 3.1 Objectives and targets

Objective	Target	How monitored and measured
Continuously improve environmental performance	<ul style="list-style-type: none"> • Develop and maintain a program of ongoing environmental training. • Capture lessons learnt where required from environmental incidents to minimise repeat issues. • Encourage and reward innovation and effort throughout the workforce. 	Compliance reporting and tracking, induction records, training delivered, lessons learnt disseminated.

3.1.3 Environmental management strategy

This EMS is the overarching management tool to maintain and improve the quarry’s environmental performance. The EMS describes the environmental management framework for the quarry and the system for avoiding, minimising and managing environmental impacts and to ensure legislative and other requirements are fulfilled. It outlines the environmental management practices and procedures that are to be followed during quarry activities.

The EMS will be reviewed and amended to incorporate additional requirements as required, changes to the project team, organisational structure and responsibilities or as improvements to procedures and methodologies develop (see Section 1.12).

The following quarry operations have been considered:

1. extraction within Stages 1–2 and 4–7 (completed – Stage 3 is not to be extracted);
2. ongoing use of the quarry infrastructure in the Stage 6 and 7 areas;
3. excavation and rehabilitation of Stage 8 area:
 - a) substages 8A to 8C;
 - b) substages 8D to 8M;
4. rehabilitation of:
 - a) substages 8A to 8C;
 - b) substages 8C to 8M;
 - c) Stage 6–7 areas following the completion of operations.

This EMS and associated EMPs focus on items 2, 3b and 4a but provide information on all of the above activities as pertinent to the integrated operation and rehabilitation of the entire quarry.

3.1.4 Environmental management plans

A series of EMPs support the EMS. These document the impacts, management measures and monitoring requirements for each key environmental aspect.

The Consent conditions define the content and issues to be addressed in the EMPs. Several plans related to the Stage 8 area have been staged because a) detailed survey information cannot be collected at this stage, and/or b) to allow the results of environmental monitoring during extraction in the Stage 8A– 8C areas to be incorporated into the preparation of management of Stage 8D and beyond. The staging of management plans is summarised in Table 3.2.

Table 3.2 Environmental management plans staging

Plan	Timing and application	Addressed in current environmental management plan?		
		Stage 8A–8C	Stage 8D–8M	Stage 6–7 (infrastructure, and processing and rehabilitation)
Environmental Management Strategy	Prepared prior to quarrying operations in the Stage 8 Area	Yes	Yes	Yes
Native Vegetation Identification Report (NVIR)	Prior to Early works commencing	Not required	To be determined	Not applicable
Early Works Construction Environmental Management Plan	Prior to quarrying operations in Area 8 if required	Not required	Not applicable	Not applicable
Noise Management Plan	Prior to quarrying operations	Yes	Yes	Yes
Air Quality Management Plan	Prior to quarrying operations in Area 8	Yes	Yes	Yes
Flood Management Plan	Prior to quarrying operations in Area 8	Yes	Yes	Yes
Soil and Water Management Plan	Prior to quarrying operations in Area 8	Yes	No	Yes
• Surface Water Management Plan	Prior to quarrying operations in Area 8	Yes	No	Yes
• Groundwater Management Plan	Prior to quarrying operations in Area 8	Yes	No	Not applicable
Ephemeral Creek Management Plan	Prior to quarrying operations in Area 8E, 8F or 8G	Not applicable	No	Not applicable
Traffic Management Plan	Prior to quarrying operations in Area 8	Yes	Yes	Yes
Aboriginal Cultural Heritage Management Plan	Prior to quarrying operations in Area 8	Yes	Yes	Not applicable
Biodiversity and Rehabilitation	Prior to quarrying operations in Area 8	Yes	No	Yes

Table 3.2 Environmental management plans staging

Plan	Timing and application	Addressed in current environmental management plan?		
		Stage 8A–8C	Stage 8D–8M	Stage 6–7 (infrastructure, and processing and rehabilitation)
Management Plan (BRMP)				
• Biodiversity Offset Strategy	Prior to quarrying operations in Area 8	Yes	No	Not applicable
Linear infrastructure impact assessment report	Prior to construction of linear infrastructure (including access roads and haul roads)	Not required	To be determined	Not applicable
Vegetation Management Plan (stages 6 and 7)	By the end of December 2020, or other timing as agreed	Not applicable	Not applicable	Yes

3.2 Environmental roles and responsibilities

The responsibilities for the implementation of this EMS and associated documents are described below.

3.2.1 Quarry Manager

The Quarry Manager will:

- be the main point of contact for advice in relation to the on-site environmental performance;
- ensure that adequate resources are provided to implement the requirements of this EMS and to meet all legislative and contract requirements for environmental management;
- direct and support the quarry employees and contractors in conducting operations that are consistent with the requirements of this EMS;
- monitor the implementation of this EMS and other relevant EMPs and monitoring programs required under the Consent;
- regularly check mitigation measures and ensures that regular environmental auditing is undertaken in accordance with Section 6.1 this EMS;
- ensure records of environmental management measures are kept on site as required;
- conduct quarterly reviews with key quarry personnel to ensure the EMS is adequately implemented;
- ensure that all contractor agreements issued to contractors and suppliers comply with the requirements of this EMS;
- report any incidents as required by the Consent;

- be available to respond to any community concerns or complaints related to environmental performance; and
- review this EMS and other management plans as required by the Consent.

3.2.2 Rehabilitation Officer

The quarry will employ a full-time Rehabilitation Officer. The Rehabilitation Officer will be onsite every working day that the quarry is operating.

The Rehabilitation Officer will:

- implement the erosion control, soil stabilisation and rehabilitation measures described in the SWMP;
- implement the rehabilitation and restoration measures described in the BRMP;
- ensure that disturbed areas are stabilised as soon as possible, initially applying temporary measures if required; and
- regularly inspect the success, or otherwise, of the measures implemented and will adjust the application of these measures accordingly.

3.2.3 All on-site employees and contractors

All employees and contractors will:

- comply with EMS and environmental legislation, rules and guidelines;
- follow instructions from the Quarry Manager as appropriate;
- work with regard to the environment, not cause damage or adverse environmental impacts; and
- report environmental incidents immediately to Quarry Manager.

3.2.4 Environmental specialists

Environmental specialists will be commissioned by Menangle Sand and Soil, as required, to provide technical input and advice on environmental matters. Environmental specialists will also undertake surveys, inspections, implement monitoring programs or prepare environmental assessments and reports, as required.

4 Training

Environmental awareness training is important to positively influence the attitude of the quarry's employees and contractors, and to ensure that employees and contractors are aware of the requirements of this EMS and their obligations.

Three main forms of training will be provided on site: site inductions, regular environmental awareness training and pre-start/toolbox meetings.

Training records of and will be held on site by Menangle Sand and Soil, including:

- the topic of the training;
- dates;
- attendees; and
- trainer details.

4.1 Site inductions

4.1.1 Quarry site

All employees and contractors will undertake a compulsory site induction that includes an environmental component prior to commencement of any work on-site.

Short-term visitors to the site for purposes such as deliveries will not be inducted but will be accompanied by inducted personnel at all times.

The induction will cover the following:

- familiarisation with the EMS;
- key on-site environmental issues, such as heritage, biodiversity, dust and noise management;
- relevant conditions of environmental licences, permits and approvals;
- specific environmental management requirements and responsibilities of everyone that works on-site;
- environmental controls and mitigation measures implemented on site to manage environmental issues;
- incident response and reporting requirements; and
- information relating to the location of environmental constraints.

Induction records will be kept in the Training Register.

Inducted personnel will be required to sign a declaration that they have been informed of the environmental issues, that they understand their responsibilities and that they will comply with the requirements of the EMS and associated documents.

4.1.2 Driver Code of Conduct

The Menangle Sand and Soil Drivers Code of Conduct is included in the TMP.

As per Consent Condition B55Consent, drivers will be required to abide by the Drivers Code of Conduct. Inductions will explain the requirements of the Drivers Code of Conduct, including measures regarding the safe and legal operation of trucks.

Inducted drivers will be required to sign a declaration that they understand their responsibilities under the Drivers Code of Conduct and that they will comply with its requirements.

4.2 Environmental awareness training

Menangle Sand and Soil will develop and implement a training matrix to ensure that training requirements are identified and that relevant personnel receive the necessary training to correctly implement environmental requirements in their work areas.

4.3 Pre-start meetings/toolbox talks

Menangle Sand and Soil conduct pre-start meetings/toolbox talks for all personnel. These are an important part of raising awareness and educating personnel on issues related to all site-related aspects including safety, quality and environmental issues.

The pre-start meetings/toolbox talks will be regularly scheduled, no less than once a fortnight, for all on-site personnel. They will encourage information sharing and participation of all on-site personnel.

Topics to be covered will include:

- spatial limits of work;
- erosion and sediment control;
- emergency and spill response;
- noise management;
- dust control;
- storage and handling of chemicals;
- onsite traffic management;
- Aboriginal heritage awareness;
- changes to previously communicated environmental mitigation measures; and
- environmental procedures and alerts.

5 Consultation and complaints

5.1 Consultation

Menangle Sand and Soil is committed to ensuring that there is regular effective communication. Consultation through clear and effective communication through all internal levels and functions is crucial to minimising environmental impacts and achieving continual improvements in environmental performance.

5.1.1 Internal communication

The methods of communication on site will include:

- pre-start meetings/toolbox talks;
- inductions;
- alerts and bulletins on specific topics; and
- Environmental Work Method Statements (EWMS).

Menangle Sand and Soil discuss environmental issues as a regular component of their toolbox and site meeting agenda. An environmental notice board is used to inform personnel of relevant environmental information such as minutes of meetings, performance standards, results of monitoring and environmental incident alerts.

5.1.2 Ongoing consultation

i Government agencies and councils

Menangle Sand and Soil and EMM have been liaising with relevant government agencies and service providers from the pre-approval stage of the project. Key government stakeholders include the Department of Planning, Industry and Environment (DPIE), Environment Protection Authority (EPA), NSW Heritage, DPIE-Water, Transport for NSW (TfNSW), Wollondilly Shire Council and Campbelltown City Council.

Menangle Sand and Soil will continue to consult with government agencies and councils as required by the Consent conditions, EPL and other statutory requirements (see Chapter 2), and as part of ongoing quarry operations. This will include consultation on:

- government agency site inspections;
- management plans; and
- notification of incidents.

Regular compliance reporting to DPIE and EPA will occur in accordance with the reporting requirements detailed in Section 7.

Incidents and non-compliances will be reported to DPIE, EPA and relevant agencies in accordance with the notification requirements detailed in Section 8.

Relevant archaeological experts, Registered Aboriginal Parties (RAPs) and NSW Heritage will be contacted if unexpected Aboriginal items be discovered, as described in the Aboriginal Heritage Management Plan.

Notes regarding government agency and council consultation will be maintained in the Consultation Register, which will also include copies of formal correspondence.

ii Other stakeholders

The quarry has been operating for over 40 years and attracts a low level of interest from the local community as evidenced by the small number of submissions on the recent Extension Project application. With the exception of the potential to see the haul-truck from the Hume Motorway, activities in the Stage 8 area will not be visible to the public.

Information regarding the quarry, including approvals, management plans, monitoring results, Annual Reviews and Independent Environmental Audits will be provided on the quarry website (see Section 9.2.3).

Any queries from local community members will be addressed promptly. Menangle Sand and Soil will consult with the wider local community on an 'as needs' basis. The need for this wider consultation will be determined based on queries or complaints made to the quarry (see Section 5.2.1) and feedback from quarry employees, several of whom live in the Menangle area and are part of the local community.

Notes regarding this consultation will be maintained in the Consultation Register, which will also include copies of any formal correspondence.

A Complaints Register will also be maintained (see Section 5.2).

5.2 Complaint management

A complaint management system to engage in active community consultation and maintain positive relations with local residents will be implemented for the site. The purpose of this system is to minimise complaints by addressing concerns upfront and monitoring the environmental performance of the site.

5.2.1 Registering complaints

Any enquiries or complaints made by members of the public to site personnel will be directed to the Quarry Manager.

Complaints may be made to the quarry's direct line during business hours (02 4633 8239) or to the Quarry Manager's mobile phone (an up-to-date telephone number is provided at www.benedict.com.au/locations/menangle) outside of business hours or for emergencies. These numbers will be provided on a sign at the site entrance.

5.2.2 Complaint response

Any complaint received by Menangle Sand and Soil regarding noise impacts from the quarry will be acted on within 24-hours in the following manner:

- details of the complaint (date, time, specifics, complainants contact details) will be recorded;
- activities occurring during the complaint period will be investigated;
- findings of operations during the complaint period will be recorded in the Complaints Register;

- relevant management practices will be reviewed as necessary; and
- findings of the review will be communicated to the complainant.

5.2.3 Complaints Register

The details of any complaint will be logged in the Complaints Register, with investigation findings and actions noted. The record of a complaint will be kept for at least 4 years after the complaint was made. The record will be produced to any authorised officer of the EPA who asks to see them.

A summary of the Complaints Register will be available on the quarry's website and will be updated monthly.

Should the complaint be relevant to any of the Consent conditions, it will be handled as per the Consent conditions relevant to that environmental aspect.

5.3 Dispute resolution

Where a complaint cannot be resolved by the quarry staff, it will be referred to the management of Benedict Industries who will resolve the matter to the best of their ability. If a dispute regarding air quality or noise cannot be resolved, a landowner may ask the Planning Secretary in writing for an independent review of the impacts of the development on their land (see Section 8.3.4).

6 Inspections, monitoring and auditing

6.1 Inspections

6.1.1 Pre-work inspections

Pre-work inspections will be conducted prior to the commencement of works on each shift. These inspections will include checking environmental controls to ensure effective operation.

6.1.2 Weekly inspections

The Quarry Manager will inspect the quarry weekly and after significant rainfall events, to ensure that environmental controls outlined in the EMPs are implemented and to evaluate their effectiveness. Inspection observations will be recorded, and any required rectification works identified.

Rectification work will be arranged by the Quarry Manager and completed within a specified timeframe. Any rectification work that cannot be completed within the specified timeframe will be recorded as a corrective action.

Issues arising from site environment inspections will be discussed at the pre-start/toolbox meetings.

6.2 Monitoring

The environmental performance and impacts of the quarry will be monitored and reported. This will include assessment of and the effectiveness of the management measures in ensuring compliance with:

- statutory requirements, limits, or performance measures and criteria;
- Consent and EPL conditions; and
- performance measures specified in the EMPs.

Environmental monitoring will:

- determine the effectiveness of the management measures;
- highlight any non-conformances or potential non-conformances;
- identify any unforeseen environmental impacts; and
- assist to identify areas for continuous environmental improvement.

6.2.1 Monitoring summary

Specific monitoring programs have been developed as part of each of the management plans. The monitoring programs have been developed to address the requirements of the Consent conditions. These specify:

- available baseline data and required additional data to be obtained and timing;
- monitoring parameters, locations and frequency;

- reporting of monitoring results against relevant criteria;
- methods to be used to analyse the monitoring data;
- procedures to identify and implement additional mitigation measures where results of monitoring are unsatisfactory; and
- any consultation to be undertaken in relation to the monitoring programs.

The timing, frequency, methodology, locations and responsibilities for the quarry environmental monitoring program are summarised in Table 6.1. Maps showing the monitoring locations are provided in the management plans.

Table 6.1 Environmental monitoring summary

Aspect	Environmental management plan	Method	Frequency	Record
Aboriginal heritage	AHMP	Rockshelter baseline monitoring to record the sites before mining and note any existing cracks and areas of vulnerability	Prior to and following extraction proximate to a rockshelter	Photographs, plan drawings
Air Quality	AQMP	Dust deposition gauges (DG1–DG3) Real-time particulate matter monitoring units	Monthly Initially, for two separate four-week campaigns	Laboratory reports Data records
Biodiversity and rehabilitation	BRMP	Landform establishment and stability assessment Growth medium development assessment Floristic monitoring Weed monitoring Nest-box and woody debris	Progressive/annual Progressive/annual Annual Annual Progressive/annual	Annual report Annual report Annual report, including plot data and photographic monitoring Annual report Annual report
Flooding	FMP	Monitor BoM rainfall forecasts Monitor BoM flood warnings	Daily in dry weather and hourly during periods of heavy rain Daily in dry weather and hourly during periods of heavy rain	- -
Groundwater	SWMP	Groundwater level in monitoring bores (BH01_S, BH01_D, BH02, BH03 and BH04) Groundwater level in temporary bores installed within the extraction areas Groundwater quality samples collected from monitoring bores Unanticipated groundwater inflow into the pit	Continuous A minimum of seven days monitoring prior to commencing extraction in each substage Annual If event occurs	Data records Field records Field records Laboratory reports Report to DPIE-Water
Meteorology	AQMP and NMP	Meteorological station east of the site entry compound	Continuous	Data records

Table 6.1 Environmental monitoring summary

Aspect	Environmental management plan	Method	Frequency	Record
Noise	NMP	Attended monitoring at 1 of a pool of 8 locations	Quarterly	Result against criteria
Surface water	SWMP	River level obtained from the Water NSW gauging station (212238)	Continuous	Data records
		Process water use	Monthly	Monthly process water volumes
		Discharges from processing area	If event occurs	Field records
		Groundwater quality samples collected from Stage 8 area sedimentation basin and Nepean River	Samples collected monthly basis for the first 12 months and quarterly thereafter	Field records Laboratory reports

6.2.2 Monitoring records

Monitoring records will be kept as hardcopies at the quarry and electronically within the Monitoring and Inspections Register. The following information will be recorded:

- the date(s) on which the sample was taken;
- the time(s) at which the sample was collected;
- the point at which the sample was taken;
- the name of the person who collected the sample; and
- the results.

Monitoring results will be reviewed to determine if they indicate that they are out of compliance (see Section 8.2) or indicate a trend that may result in non-compliance.

6.3 Auditing

Environmental auditing will assess compliance with the EMS and associated plans, the Consent and any relevant legal and other requirements, including the EPL and WALs.

6.3.1 Internal audits

Implementation of the EMS will be regularly audited by the Quarry Manager. Internal auditing will be undertaken annually or more frequently where required based on the environmental risk.

An audit checklist will be developed and amended as necessary to reflect changes to this EMS, subsequent approvals and changes to Acts, regulations, or guidelines. The findings arising from internal audits will be recorded as corrective actions. The implementation of the corrective actions (or appropriate alternatives) will be regularly reviewed by Quarry Manager and managed to be closed out in agreed timeframes.

6.3.2 External independent environmental audits

An independent environmental audit, commissioned and paid for by Menangle Sand and Soil, will be conducted within one year of the commencement of Quarrying Operations in the Stage 8 Area and every three years thereafter, unless the Planning Secretary directs otherwise.

The audit will be conducted by a suitably qualified lead auditor who has been endorsed by DPIE to undertake the audit in accordance with the *Independent Audit Requirements* (DPE 2018). The lead auditor will be supported, as required, by independent experts who have been endorsed by the Secretary and in consultation with relevant agencies. The lead auditor will consult with the relevant agencies as part of the audit.

The audit will assess the environmental performance of the quarry and whether it is complying with the Consent conditions, EPL, water access licences, and the assessments, strategies, plans and program required by the Consent.

The audit will review the adequacy of the approved strategies, plans and programs required under the Consent conditions, EPL and water access licences and recommend any identified measures or actions to improve the environmental performance of the quarry or to improve the EMS, EMPs or other documents required by the Consent.

Audit findings will be recorded in the Approvals Register for action and close out. The register will detail the source of the action (eg audit, inspection or other), the action required, target close out date, actual close out date and the person responsible for the action item.

Within three months of commencing the audit, or as otherwise agreed by the Secretary, the audit report will be submitted to DPIE, and any other NSW agency that requests it, together with a response to any recommendations and a timetable for implementation. Action items arising from the audit will be implemented to the satisfaction of the Secretary.

Recommended actions will be recorded in the Environmental Incident and Action Register (see Section 8.3.4).

7 Regular reporting

7.1 Waste records and reports

7.1.1 Building and demolition waste

A record of each load of building and demolition waste imported to the quarry will be kept in the Waste Register, in accordance with EPL Condition M4.2, including:

- a copy of the waste classification report in accordance with the Waste Classification Guidelines, including the classification and the limits specified in EPL 3991;
- the quantity (in tonnes) of the building and demolition waste received;
- the date and time that the building and demolition waste was received;
- the registration number of the vehicle transporting the building and demolition waste to the quarry;
- the name and contact details of the company or individual delivering the building and demolition waste to the quarry; and
- the source(s) and address from where the building and demolition waste was received.

A Pre-processed Building and Demolition Waste report will be prepared annually in accordance with EPL Condition E1.1. The report will include the following for the Annual Return period (from 11 June to the 10 June the following year):

- the building and demolition waste received at the quarry;
- which EPA licensed premises it came from;
- dates received;
- validation results for each load;
- quantities and fraction sizes received;
- quantity/weight per load; and
- total annual quantity received.

The Pre-processed Building and Demolition Waste report will be submitted with the Annual Return to the EPA (see Section 7.3).

7.1.2 Wood waste

A record of each load of wood waste imported to the quarry will be kept in the Waste Register, in accordance with EPL Condition M4.4, including:

- the quantity (in tonnes) of the wood waste received;

- the date and time that the wood waste was received;
- the name and contact details of the company or individual delivering the wood waste to the premises; and
- the source(s) and address from where the wood waste were received.

The quantities of wood waste that do not meet the definition outlined in EPL Condition L2.1, that is urban wood residues that may have been treated, painted or contaminated, will be recorded.

A Wood Waste report will be prepared annually in accordance with EPL Condition E2.1. The report will include the following for the Annual Return period (from 11 June to the 10 June the following year):

- the wood waste records; and
- quantities and details of the end use (horticultural, timber board, alternate fuel source) any unforeseen benefits or results.

The Wood Waste report will be submitted with the Annual Return to the EPA (see Section 7.3).

7.2 Annual Review to DPIE

An Annual Review report will be submitted to DPIE by the end of March each year after commencing quarrying in Stage 8. This Annual Review will include:

- details of the activities undertaken during the reporting period and those planned for the next year;
- annual production data in accordance with Consent conditions A37 and A38;
- a summary of compliance/non-compliance of monitoring results against the relevant statutory requirements, limits and performance measures/criteria as they relate to the Stage 8 Area, and the requirements of the management plans required by the Consent;
- a summary of any incidents;
- a summary of any community complaints against the relevant statutory requirements, limits, performance measures/criteria and the requirements of the management plans required by the Consent;
- a comprehensive review of monitoring results for that period as well as comparison to past years;
- identification of trends in monitoring data across life of the Extension Project;
- the effectiveness of noise and air quality management systems;
- identification of any trends in the monitoring data over the life of the Extension Project;
- identification of any discrepancies between the predicted and actual impacts/monitoring results/complaints of the Extension Project as described in the documents listed in Consent Condition A79(c) [ie the original EIS (Planning Workshop 1987), EA (Mod 1) (EMM 2017), Amended Project Summary (EMM 2020) and the Development Layout (Appendix 1 of the Consent)], and analysis the potential cause of any significant discrepancies;
- procedures for rectifying any non-compliances identified during environmental auditing, review of compliance or incident management are also documented in the annual report; and

- description of the measures that will be implemented over the next calendar year to improve the environmental performance of the quarry.

The Annual Review report will be submitted to DPIE via the Major Projects Planning Portal and to WSC by the 31 March each year. It will be placed on the quarry's website.

7.3 Annual Return to EPA

An Annual Return to the EPA will be prepared in the EPA-approved form for Annual Return period (from 11 June to the 10 June the following year). It will comprise of:

- Statement of Compliance (signed by the licence holder or by a person approved in writing by the EPA to sign on behalf of the licence holder);
- Monitoring and Complaints Summary;
- Statement of Compliance - EPL Conditions;
- Statement of Compliance - Load based Fee;
- Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan;
- Statement of Compliance - Requirement to Publish Pollution Monitoring Data;
- Statement of Compliance - Environmental Management Systems and Practices;
- Pre-processed Building and Demolition Waste report (see Section 7.1.1); and
- Wood Waste report (see Section 7.1.2).

The Annual Return will be supplied to the EPA via eConnect EPA or by registered post by 9 August (60 days after the end the reporting period).

8 Emergencies, incidents and non-compliances

Menangle Sand and Soil will identify environmental non-conformances, including environmental incidents, and will undertake the required corrective actions to address the non-conformance and implement preventative actions where required.

8.1 Emergency management

A Pollution Incident Response Management Plan (PIRMP) has been developed for the quarry in accordance with the requirements in Part 5.7A of the POEO Act and the POEO Regulations.

The objectives of the PIRMP are to:

- ensure comprehensive and timely communication about a pollution incident to:
 - staff at the premises;
 - EPA;
 - Council;
 - NSW Ministry of Health;
 - WorkCover NSW;
 - Fire and Rescue NSW; and
 - people outside the facility who may be affected by the impacts of the pollution incident.
- minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks; and
- ensure that the plan is properly implemented by trained staff, identifying persons responsible, or implementing and ensuring that the plan is regularly tested for accuracy, currency and suitability.

The plan provides an initial response procedure flowchart that provides the steps to be taken if an environmental incident (see Section 8.3.1) occurs:

1. Determine:
 - a) if there is a threat of material harm to the environment; or
 - b) if there is a threat to human health or safety; or
 - c) if there is a threat to property; or
 - d) if emergency evacuation required.

2. The site manager or delegate is to arrange an emergency evacuation if required.
3. Emergency services are to be call if required.
4. Notify Work Place Health and Safety Advisor, Operations/General Manager and appropriate authorities (see Section 8.3.2).
5. Neighbours are to be notified if required.
6. The incident is to be managed, controlled and cleaned up as required (see Section 8.1.2).
7. Prepare an incident report (see Sections 8.3.2 and 8.3.3).

8.1.1 Emergency communications

Persons responsible for reporting an environmental emergency should:

- 000 or 112 if the incident presents an immediate threat to human health or property. Dialling 000 serves to contact Fire and Rescue NSW, the NSW Police and the NSW Ambulance Services; and
- call the 24-hour hotline for the relevant service(s) listed in Table 7.1 if the incident does not present an immediate threat to human health or property.

Emergency contact details are listed in a table below.

Table 8.1 Environmental emergency contact details

Emergency contact organisation	Contact details
Police	000 or 112
State Emergency Service	132 500
Ambulance	000
Fire and Rescue NSW	000
DPIE Incident Reporting Hotline	1300 814 609
EPA's Environment Line	131 555
Wollondilly Shire Council	4677 1100
WorkSafe NSW	131 050
Sydney Water	13 20 90
Integral Energy	131 003
Wildlife Information Rescue Education Service (WIRES)	1300 094 737
Quarry Manager	0425 266 664

8.1.2 Emergency actions

In accordance with EPL 3991 Condition E4.1, Menangle Sand and Soil will:

- Clean up any spill, leak or other discharge of any waste(s) or other material(s) as soon as practicable after it becomes known.
- Remove and lawfully dispose of any liquid and non-liquid waste deposited on the quarry site as soon as practicable or in accordance with any direction given by the EPA.

- Provide all monitoring data as required by EPL 3991 or as directed by the EPA.

In accordance with EPL 3991 Condition E4.2, in the event of an earthquake, storm, fire, flood or any other event where it is reasonable to suspect that a pollution incident has occurred, is occurring or is likely to occur, the Menangle Sand and Soil will:

- a) make all efforts to contain all firewater within the quarry;
- b) make all efforts to control air pollution from the quarry;
- c) make all efforts to contain any discharge, spill or run-off from the quarry;
- d) make all efforts to prevent flood water entering the quarry;
- e) remediate and rehabilitate any exposed areas of soil and/or waste;
- f) lawfully dispose of all liquid and solid waste(s) stored on the premises that is not already securely disposed of;
- g) at the request of the EPA monitor groundwater beneath the quarry and its potential to migrate from the quarry;
- h) at the request of the EPA monitor surface water leaving the quarry; and
- i) ensure the licensee's premises is secure.

8.1.3 Flooding

The quarry site periodically floods. The Flood Management Plan describes monitoring for forecast flooding the actions to be taken when a flood warning is received.

8.2 Non-conformance and corrective actions

8.2.1 Identification and corrective actions

Environmental non-conformance will be identified through processes outlined in this EMS such as monitoring, audits, regular inspections and complaints. Reporting on environmental non-conformance will be the responsibility of all Menangle Sand and Soil's employees and contractors. Tracking of environmental non-conformances and associated corrective actions will be the responsibility of the Quarry Manager.

Monitoring results will be used to identify existing or potential non-compliances. Where monitoring results exceed performance criteria or are outside of the expected range, the following process will be implemented:

- the results will be analysed with the view to determining possible causes for the result(s) including a review of the potential activities impacting the site of the exceedance;
- a site inspection will be undertaken;
- relevant personnel will be contacted and advised of the problem;
- action will be implemented immediately to rectify the problem where possible; or

- an action will be identified, agreed with the Quarry Manager and implemented in a timely manner.

Performance measures provide indicators to potential non-compliance. Monitoring outcomes which exceed performance measures may be subject to the implementation of a trigger action response plan (TARP) which provides a hierarchy of alarms or trigger levels for each potential indicator, with appropriate responses and timing. Where relevant, TARPs have been provided within the applicable EMPs to allow prompt identification of unpredicted impacts and to guide the implementation additional management measures and corrective actions.

8.2.2 Non-compliance notification

Any monitoring results that indicate in a non-compliance of the Consent, EPL or other statutory condition will be notified in writing via the Major Projects Website within seven days of becoming aware of the non-compliance. The notification will include:

- the development name: Menangle Sand and Soil Quarry;
- the Consent number: Development Consent 85/2865;
- the condition to which the non-compliance has been identified;
- the nature of the non-compliance;
- the reason for the non-compliance (if known); and
- the actions that have been, or will be, undertaken to address the non-compliance.

Non-compliances will be recorded in the Environmental Incident and Action Register (see Section 8.3.4).

Non-compliances will also be reported in the Annual Review (see Section 7.2) and those related to EPL 3991 in the Annual Return (see Section 7.3).

8.3 Incidents

8.3.1 Incident response

The Consent defines an 'incident' as:

An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.

Persons involved in, or witnessing, an incident will report it immediately to the Quarry Manager. Once the incident has been reported internally via the correct channels, all efforts will be undertaken immediately to avoid and reduce impacts of incidents and put suitable controls put in place.

As soon as Menangle Sand and Soil become aware of an incident or potential incident with actual or potential significant harm, it will immediately notify DPIE and any other relevant agencies (see Section 8.3.2). EPA will also be notified immediately of an actual or potential incident with significant offsite impacts.

Incident investigations will be closed as quickly as possible, taking the required action to resolve each environmental incident and prevent re-occurrence. A detailed report will be prepared and submitted following investigations of the causes and identification of the necessary additional preventative measures no later than 7 days after the incident or potential incident (see Section 8.3.2).

8.3.2 Incident notification and reporting

i Immediate notification

As soon as Menangle Sand and Soil becomes aware of an incident, it will immediately notify DPIE and any other relevant agencies via the Major Projects Website in accordance with Appendix 8 of the Consent.

ii Written incident notification within seven days

Within seven days of the incident, Menangle Sand and Soil will submit a written incident notification via the Major Projects Website. Notification will be sent to DPIE within this period days even if:

- Menangle Sand and Soil fails to notify DPIE immediately after it becomes aware of an incident; or
- having given such notification, subsequently forms the view that an incident has not occurred.

The written incident notification will be prepared in accordance with Appendix 8 of the Consent. It will:

- identify the development and application number (Menangle Sand and Soil Quarry, Development Consent 85/2865);
- provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
- identify how the incident was detected;
- identify when the applicant became aware of the incident;
- identify any actual or potential non-compliance with conditions of consent;
- provide information on the reasons/causes for the non-compliance, if known;
- describe what immediate steps were taken in relation to the incident;
- identify further action(s) that will be taken in relation to the incident; and
- identify a project contact for further communication regarding the incident.

iii Incident report within 30 days (or as otherwise agreed)

Within 30 days of the incident, or as otherwise agreed to by the Planning Secretary, Menangle Sand and Soil will submit a detailed report notification via the Major Projects Website and any relevant public authorities (as determined by the Planning Secretary).

The incident report will be prepared in accordance with Appendix 8 of the Consent. It will include:

- a summary of the incident;
- outcomes of an incident investigation, including identification of the cause of the incident;
- details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and

- details of any communication with other stakeholders regarding the incident.

iv Noise or air quality exceedances

As soon as practicable, and no longer than 7 days, after obtaining monitoring results showing an exceedance of any noise criterion (as provided in the NMP) or any air quality criterion (as provided in the AQMP) (ie as listed in Part B of the Consent), following the date of commencement of quarrying operations in the Stage 8 Area, Menangle Sand and Soil will provide details of the exceedance to any affected landowners/tenants if Menangle Sand and Soil has not otherwise reached an agreement to exceed the relevant criteria with the affected landowner pursuant to Consent Condition B5 or B12. For any exceedance of an air quality criteria, Menangle Sand and Soil will provide to any affected landowners and tenants a copy of the *Mine Dust and You* fact sheet (NSW Health 2017).

v Additional reporting

Incidents will be recorded in the Environmental Incident and Action Register (see Section 8.3.4).

Incidents will also be reported in the Annual Review (see Section 7.2) and those related to EPL 3991 in the Annual Return (see Section 7.3).

8.3.3 Incident reporting in accordance with the POEO Act

The POEO Act requires the occupier of premises, the employer or any person carrying out an activity which has caused a pollution incident to immediately notify each relevant authority when material harm to the environment is caused or threatened.

Menangle Sand and Soil will notify EPA of incidents in or around the quarry site via the EPA Environment Line (telephone 131 555) in accordance with Part 5.7 of the POEO Act:

147 Meaning of material harm to the environment

(1) For the purposes of this Part—

(a) harm to the environment is material if—

(i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or

(ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and

(b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

(2) For the purposes of this Part, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.

148 Pollution incidents causing or threatening material harm to be notified

(1) **Kinds of incidents to be notified** This Part applies where a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened.

(2) **Duty of person carrying on activity to notify** A person carrying on the activity must, immediately after the person becomes aware of the incident, notify each relevant authority of the incident and all relevant information about it.

(3) **Duty of employee engaged in carrying on activity to notify** A person engaged as an employee in carrying on an activity must, immediately after the person becomes aware of the incident, notify the employer of the incident and all relevant information about it. If the employer cannot be contacted, the person is required to notify each relevant authority.

(3A) **Duty of employer to notify** Without limiting subsection (2), an employer who is notified of an incident under subsection (3) or who otherwise becomes aware of a pollution incident which is related to an activity of the employer, must, immediately after being notified or otherwise becoming aware of the incident, notify each relevant authority of the incident and all relevant information about it.

(4) **Duty of occupier of premises to notify** The occupier of the premises on which the incident occurs must, immediately after the occupier becomes aware of the incident, notify each relevant authority of the incident and all relevant information about it.

(5) **Duty on employer and occupier to ensure notification** An employer or an occupier of premises must take all reasonable steps to ensure that, if a pollution incident occurs in carrying on the activity of the employer or occurs on the premises, as the case may be, the persons engaged by the employer or occupier will, immediately, notify the employer or occupier of the incident and all relevant information about it.

(6) **Extension of duty to agents and principals** This section extends to a person engaged in carrying on an activity as an agent for another. In that case, a reference in this section to an employee extends to such an agent and a reference to an employer extends to the principal.

8.3.4 Independent review

If, at any time following the date of commencement of quarrying operations in the Stage 8 Area, a landowner considers the development to be exceeding any noise criterion (as provided in Consent Condition B4 and the Noise Management Plan) or any air quality criterion (as provided in in Consent Condition B11 and the Air Quality Management Plan), they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their land.

If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.

If the Planning Secretary is satisfied that an independent review is warranted, then within three months of the Planning Secretary's decision, or as otherwise agreed by the Planning Secretary and the landowner, Menangle Sand and Soil will:

- a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to:
 - i) consult with the landowner to determine their concerns;
 - ii) conduct monitoring to determine whether the development is complying with the relevant noise or air quality criteria; and
 - iii) if the development is not complying with the criteria, identify measures that could be implemented to ensure compliance with the relevant criteria; and

- b) give the Planning Secretary and landowner a copy of the independent review; and
- c) comply with any written requests made by the Planning Secretary to implement any findings of the review.

8.4 Environmental Incident and Action Register

Menangle Sand and Soil will maintain an Environmental Incident and Action Register of accidents, incidents and potential incidents. When an environmental non-conformance or environmental incident is identified, the details of these will be documented in an Environmental Incident and Action Register, with the following steps to be taken:

- the register will outline the nature of the non-conformance/incident, the corrective and preventative actions proposed and to be undertaken, the responsibilities and schedule for completion of these actions;
- non-conformances associated with monitoring, audits, inspections and complaints will be linked to the records of these;
- once an action has been completed, the status of the incident will be updated to close the action, with comments and completion date; and
- the Environmental Incident and Action Register will be reviewed weekly by the Quarry Manager.

The Environmental Incident and Action Register will be available for inspection at any time by DPIE or EPA.

9 Document management

9.1 Environmental management document summary

Menangle Sand and Soil will maintain all environmental management documents as required by the Consent, EPL, WAL and other licences and approvals as summarised in Table 9.1.

Table 9.1 Environmental management documents

Document/data	Register/quarry website	Timeframe	EMS Section
Notice of Orders for LEC 2018/342158	Approvals Register Quarry website	Issued 10 September 2020	Section 1.1
Notice of Modification for DA 85/2865 Consent	Approvals Register Quarry website	Issued 5 November 2021	Section 1.1
Environment Protection Licence 3991	Approvals Register	Most recent variation 22 January 2021 (includes Stage 8 area)	Table 2.1
Water Access Licences	Approvals Register	Issued various dates	Table 2.1
Controlled Activity Approval	Approvals Register	Application for Substages 8A–8C submitted 7 May 2021	Table 2.1
Approval under Section 138 of the Roads Act	Approvals Register	Once, prior to construction work within the Hume Motorway Road Reserve	Table 2.1
Aboriginal Heritage Impact Permit	Approvals Register	If required	Table 2.1
<i>Environmental Impact Statement Proposed Sand and Soil Extraction Nepean River & Environs Menangle NSW (Planning Workshop 1987)</i>	Environmental Management Document Register Quarry website	9 December 1987	-
<i>Menangle Quarry Extension Environmental Assessment (EMM 2017)</i>	Environmental Management Document Register Quarry website	23 May 2017	-
<i>DA85/2865 Modification Report (MOD2) (EMM 2021)</i>	Environmental Management Document Register Quarry website	3 June 2021	-
<i>Land and Environment Court Proceedings 342158 of 2018, Applicant's Description of Amended Project, Menangle Sand & Soil Pty Limited v Minister for Planning (EMM 2020).</i>	Environmental Management Document Register Quarry website	24 August 2020	-
Benedict Environmental Management Policy	Environmental Management Document Register	Periodic review	Section 3.1.1 Appendix D
Environmental Management Strategy (EMS)	Environmental Management Document Register Quarry website	This document Review and update in accordance with Consent	Section 3.1.3

Table 9.1 Environmental management documents

Document/data	Register/quarry website	Timeframe	EMS Section
		Condition D5 (see Section 9.2.2)	
Environmental management plans: <ul style="list-style-type: none"> • Native Vegetation Identification Report (NVIR) • Noise Management Plan (NMP) • Air Quality Management Plan (AQMP) • Flood Management Plan • Soil and Water Management Plan (SWMP) • Surface Water Management Plan • Groundwater Management Plan • Ephemeral Creek Management Plan • Traffic Management Plan (TMP) • Aboriginal Cultural Heritage Management Plan (ACHMP) • Biodiversity and Rehabilitation Management Plan (BRMP) • Biodiversity Offset Strategy • Linear infrastructure impact assessment report • Vegetation Management Plan (stages 6 and 7) 	Environmental Management Document Register Quarry website	Some plans to be extended to include substages 8D and beyond (see Table 3.2) Review and update in accordance with Consent Condition D5 (see Section 9.2.2)	Section 3.1.4
Pollution Incident Response Management Plan (PIRMP)	Environmental Management Document Register	26 February 2020	Section 8.1
Induction records	Training Register	Ongoing	Section 4.1
Environmental awareness training records	Training Register	Ongoing	Section 4.2
Pre-start meetings/toolbox talks records	Pre-start meetings/toolbox talks records	Ongoing	Section 4.3
Correspondence with public authorities	Consultation Register	Ongoing	Section 5.1.2i
Correspondence with other stakeholders	Consultation Register	Ongoing	Section 5.1.2ii
Complaints	Complaints Register Quarry website	If required	Section 5.2
Weekly inspections	Monitoring and Inspection Register	Weekly	Section 6.1.2
Environmental monitoring results	Monitoring and Inspection Register Quarry website (comprehensive summary)	See Table 6.1	Section 6.2
Internal audits	Audit Register	Annual or as required	Section 6.3.1
External independent environmental audits	Audit Register Quarry website	Within one year of the commencement of	Section 6.3.2

Table 9.1 Environmental management documents

Document/data	Register/quarry website	Timeframe	EMS Section
		Quarrying Operations in the Stage 8 Area and every three years thereafter	
Building and demolition waste records	Waste Register	Ongoing	Section 7.1.1
Pre-processed Building and Demolition Waste report	Waste Register	Annual (Annual Return period)	Section 7.1.1
Wood waste records	Waste Register	Ongoing	Section 7.1.2
Wood Waste report	Waste Register	Annual (Annual Return period)	Section 7.1.2
Annual Review	Environmental Management Document Register Quarry website	Annual (by 31 March)	Section 7.2
Annual Return	Environmental Management Document Register	Annual (by 9 August)	Section 7.3
Non-conformance reporting	Environmental Incident and Action Register	If required	Section 8.2.1
Incidents: <ul style="list-style-type: none"> • Immediate notification • Written incident notification • Incident report 	Environmental Incident and Action Register	If required (see timing in Section 8.3)	Section 8.3
Record of environmental management document review/revision	Environmental Management Document Register	Various (see Section 9.2.1)	Section 9.2.1

Environmental management documents will be stored electronically and be available at the quarry site office.

9.2 Document review and control

9.2.1 Document and data control

All environmental management documents will be subject to ongoing review and continual improvement.

Documents and data that are to be issued and liable to change will be controlled to ensure that they are approved by the Quarry Manager before issue and that the current issue or revision is known to, and available to, relevant staff. Controlled documents and data will be uniquely identified with a revision number on each page.

Obsolete documents and data may be kept for contractual or other reasons but will be clearly marked 'superseded'.

9.2.2 Document review and improvement

In accordance with condition D5, the suitability of environmental management documents (existing strategies, plans and programs) required under the Consent will be reviewed within three months of:

- (a) the submission of an incident report under condition D7;

- (b) the submission of an Annual Review under condition D9;
- (c) the submission of an Independent Environmental Audit under condition D11;
- (d) the approval of any modification to the conditions of this consent; or
- (e) the issue of a direction of the Planning Secretary under condition A8 which requires a review.

The review of each environmental document will be recorded in the Environmental Management Document Register, including where it is determined that no revision to an environmental document is required.

Only the Quarry Manager, or their delegate, will have the authority to change environmental management documentation.

The Quarry Manager, or their delegate, will coordinate the preparation, review and distribution of environmental management documents.

In accordance with Consent Condition D6, revised environmental management documents will be submitted to the Planning Secretary for approval within six weeks of the review where they have been revised to improve the environmental performance of the development, cater for a modification or comply with a direction.

The approved EMS will be held in the Menangle Sand and Soil site office and will be available upon request.

9.2.3 Continuous improvement

Continuous improvement of this EMS will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement.

The continuous improvement process will be designed to:

- identify areas of opportunity for improvement of environmental management and performance;
- determine the cause or causes of non-conformances and deficiencies;
- develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies;
- document any changes in procedures resulting from process improvement; and
- make comparisons with objectives and targets.

9.3 Menangle Sand and Soil Quarry website

Menangle Sand and Soil will provide the following information and documents on the quarry's website:

- the EIS, EA (Mod 1), Amended Project Summary and the Development layout;
- all current statutory approvals for the development;
- all approved strategies, plans and programs required under the conditions of this consent;

- regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;
- a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
- a summary of the current stage and progress of the development;
- contact details to enquire about the development or to make a complaint;
- a complaints register, updated monthly;
- the Annual Reviews of the development;
- audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant's response to the recommendations in any audit report; and
- any other matter required by the Planning Secretary.

Menangle Sand and Soil will keep this information up to date for the life of the development and to the satisfaction of the Planning Secretary.

References

EMM 2017, *Menangle Quarry Extension Environmental Assessment*. Report prepared for Menangle Sand and Soil Pty Limited by EMM Consulting Pty Limited. 23 May 2017.

EMM 2020, *Land and Environment Court Proceedings 342158 of 2018, Applicant's Description of Amended Project, Menangle Sand & Soil Pty Limited v Minister for Planning*. Report prepared for Menangle Sand and Soil Pty Limited by EMM Consulting Pty Limited. 24 August 2020.

EMM 2021, *DA85/2865 Modification Report (MOD2), Menangle Sand and Soil Quarry*. Report prepared for Menangle Sand and Soil Pty Limited by EMM Consulting Pty Limited. 3 June 2021.

Planning Workshop 1987. *Environmental Impact Statement Proposed Sand and Soil Extraction Nepean River & Environs Menangle NSW*.

NSW Health 2017. *Mine Dust and You*. Fact sheet accessed at www.health.nsw.gov.au/environment/factsheets/Pages/mine-dust.aspx.

Appendix A

Agency consultation

Our ref: STH05/01238/21
Contact: Andrew Lissenden 0418 962 703

18 December 2020

Ernest Dupere
Benedict Industries Pty/Ltd
BY EMAIL: ernest@benedict.com.au

MENANGLE SAND AND SOIL – REQUEST FOR IN PRINCIPLE AGREEMENT TO HOW MATERIAL IS TRANSPORTED WITHIN THE SITE.

Dear Ernest,

Transport for NSW (TfNSW, formerly Roads and Maritime Services) refers to your email dated 4 November 2020, and the subsequent phone discussion had regarding the above.

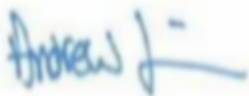
TfNSW notes that:

- You are looking at amending the currently approved Menangle Quarry development consent (DA85/2865). As such, you are seeking an 'in-principle agreement' with TfNSW so as to enable you to progress a proposed design with some confidence that it is open to the idea;
- The change you are proposing seeks to allow material on the eastern side of the Hume Highway to be transported by heavy vehicles, as opposed to a conveyor belt, to the processing area on the western side of the Hume Highway (i.e. under the Menangle Bridges);
- The Menangle Bridges are a TfNSW asset;
- You have had discussions with TfNSW Area Maintenance Manager (Vincent Boer) who has not objected to the concept subject to additional information being provided; and
- The current development consent will need to be amended (i.e. lodgement of a Section 4.55 application) to allow the proposed change from a conveyor belt system to the use of trucks/heavy vehicles.

Having regard for the above, TfNSW advises that it provides 'in-principle agreement' to the concept of using heavy vehicles to transport material under the Hume Highway/Menangle Bridges being further investigated. This being subject to the requirements outlined in **Attachment 1**.

If you have any questions, please contact Andrew Lissenden on 0418 962 703.

Yours faithfully



Andrew Lissenden
Development Assessment Officer
Community and Place | South Region

Cc: lauren.evans@planning.nsw.gov.au

1. Engineering designs that have been prepared by a suitably qualified person will need to be provided to TfNSW for its approval. These will need to have regard for issues including, but not limited to, the protection of piers and the bridge structure;
2. Further discussions be had with Vincent Boer (TfNSW Area Maintenance Manager) and Dony Castro (TfNSW Bridge Maintenance Planner) during the preparation of engineering designs;
3. The implementation and ongoing maintenance of any design approved by TfNSW will be at the quarry operator/owners own cost;
4. TfNSW will be licenced to use the enhanced access tracks; and
5. An application to amend the existing development consent will be lodged to enable the all relevant environmental and design factors to be considered.

Appendix B

DPIE endorsement letter



Jeremy Slattery
EMM Consulting
PO Box 21
St Leonards NSW 1590

Via email: jslattery@emmconsulting.com.au

13/10/2020

Dear Mr Slattery

**Menangle Quarry (DA 85/2865)
Stage 8 Environmental Management Plans
Endorsement of Experts**

I refer to your letter dated 6 October 2020 seeking the Planning Secretary's endorsement of suitably qualified persons to prepare various reports and environmental management plans required to carry out Stage 8 of the above development.

The Department has reviewed the information provided and is satisfied that each of the nominated persons possesses the necessary qualifications and experience to prepare the relevant documents. Consequently, the Planning Secretary has endorsed the appointment of these experts as outlined below.

Document	Relevant Condition	Appointed Person
Native Vegetation Identification Report(s)	A10(b)(i) of Schedule 2	Dr Steven Ward
Ephemeral Creek Management Plan	B40(a) of Schedule 2	Chris Kuczera
Traffic Management Plan	B55(a) of Schedule 2	Abdullah Uddin
Aboriginal Cultural Heritage Management Plan	B62(a) of Schedule 2	Ryan Desic

Please note that any further post approval requests, including endorsement requests and the lodgement of plans for approval should be made via the Department's Major Projects website.

If you wish to discuss this matter further, please contact Lauren Evans at the details above.

Yours sincerely,

Matthew Spratt
Director
Resource Assessments
as nominee of the Planning Secretary

Appendix C

Plan approval



Mr Mark Hutcheson
Operations Planning Support Manager
Benedict Recycling Pty Ltd
11 Narabang Way
Belrose, NSW, 2085

21/06/2021

Dear Mr Hutcheson,

**Menangle Sand and Soil Quarry (DA85/2865)
Environmental Management Strategy**

I refer to the Environmental Management Strategy which was submitted in accordance with condition D1 of Schedule 2 of the consent for the Menangle Sand and Soil Quarry (DA85/2865).

The Department has carefully reviewed the document and is satisfied that it is consistent with the relevant conditions of consent.

Accordingly, the Planning Secretary has approved the Environmental Management Strategy (Revision 2, dated 17 June 2021). Please ensure that the approved plan is placed on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Callum Firth at callum.firth@dpie.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Spratt'.

Matthew Spratt
Director
Resource Assessments (Coal & Quarries)

As nominee of the Planning Secretary

Appendix D

Environment Policy

Environmental Policy

Benedict Industries and its related companies are committed to achieving a high standard of environmental care in conducting its business as a Resources, Recycling, and Quarry Products supply company.

Benedict Industries aim is to balance its economic and social responsibilities with minimising the impact of our activities on the surrounding environment. This can be achieved by minimising waste, preventing controllable pollution and using natural resources responsibly.

With employees, suppliers and contractors actively supporting our efforts, Benedict Industries and its related companies, will achieve its aim of protecting the environment in which we live.

Our commitment to the environment includes:

- Planning and conducting our work activities in such a way that adverse effects on the environment are avoided;
- Conducting business in a manner that is environmentally responsible, having due regard to changing community expectations;
- Complying with all applicable acts, regulations and standards;
- Conserving resources used by Benedict Industries in the execution of its business activities, including the maintenance of effective energy conservation strategies;
- Informing all personnel and contractors of their responsibilities in relation to environmental matters and to monitor the manner in which these responsibilities are discharged;
- Developing and implementing contingency plans for the control of environmental incidents that can be reasonably foreseen;
- Implementing management systems to identify, control and monitor environmental risks arising from our operations;
- Regular auditing to achieve ongoing improvements in environmental management and prevention of pollution.



Ernest Dupere

DIRECTOR
Benedict Industries Pty Ltd



Dana Dupere

DIRECTOR
Benedict Industries Pty Ltd

