



Application for Works Approval

Division 3, Part V *Environmental Protection Act 1986*

Licence Number	W6287/2019/1
Applicant	Carbone Bros Pty Ltd
ACN	008 702 369
File Number	DER2019/000387
Premises	McLarty Site Mining tenement M70/1339
Date of Report	11 December 2019

1. Definitions of terms and acronyms

In this Decision Report, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
AACR	Annual Audit Compliance Report
ACN	Australian Company Number
AER	Annual Environment Report
AS 4156.6 – 2000	Australian Standard AS 4156.6 – 2000: Determination of Dust/moisture Relationship for Coal.
Category/ Categories/ Cat.	Categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CS Act	<i>Contaminated Sites Act 2003 (WA)</i>
Decision Report	refers to this document.
Delegated Officer	an officer under section 20 of the EP Act.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EPA	Environmental Protection Authority
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
Existing Licence	The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of, and during this Review
Licence Holder	Carbone Bros Pty Ltd
m ³	cubic metres
Minister	the Minister responsible for the EP Act and associated regulations
MS	Ministerial Statement
mtpa	million tonnes per annum

NEPM	National Environmental Protection Measure
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Occupier	has the same meaning given to that term under the EP Act.
PM	Particulate Matter
PM ₁₀	used to describe particulate matter that is smaller than 10 microns (µm) in diameter
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	The McLarty Site, mining tenement M70/1339
Primary Activities	as defined in Schedule 2 of the Revised Licence
Review	this Licence review
Revised Licence	the amended Licence issued under Part V, Division 3 of the EP Act following the finalisation of this Review.
Risk Event	As described in <i>Guidance Statement: Risk Assessment</i>
UDR	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)</i>
µg/m ³	micrograms per cubic metre
µg/L	micrograms per litre

2. Purpose and scope of assessment

An application for a Works Approval, W6287/2019/1, was received from Carbone Bros Pty Ltd (Applicant) on 11 July 2019 to install a screening plant within the McLarty Site mining tenement M70/1339 (the Premises). As the quarry is primarily a sand quarry a crushing circuit is not required to be installed with the screening plant. This will make it a prescribed premise under Category 12 – Screening etc. of material and will require a licence to operate on completion of installation approved under this works approval.

This Decision Report presents an assessment of potential environmental and public health risks from emissions and discharges from the construction and operation of the Premises.

2.1 Application details

The Delegated Officer determined that additional information was required to facilitate assessment of the noise impacts from the proposed gravel extraction and processing activities, with the documents submitted during the assessment process listed in Table 2. This further information was provided on 16 August 2019 and 13 September 2019.

Table 2: Documents and information submitted during the assessment process

Document/information description	Date received
McLarty Site Works Approval Application (Mining Lease 70/1339) Accendo Australia	11 July 2019
Carbone Bros Pty Ltd – Accendo Australia – McLarty Site – Works approval application – Response to request for further information	16 August 2019
Carbone Bros Pty Ltd – Accendo Australia – McLarty Site – Works approval application – Response to request for further information	13 September 2019

Table 3: Prescribed Premises Categories that have been applied for

Classification of Premises	Description	Approved Premises production or design capacity or throughput
Category 12	Screening etc. of material: premises on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	50,000 tonnes or more per year

3. Overview of Premises

3.1 Operational aspects

The material to be screened is sand quarried from the Premises with, potentially, some limestone requiring breaking with excavators. The quarrying will be carried out progressively from the Premises northern boundary to the southern boundary. The topsoil will be removed for stockpiling then digging of sand using bulldozers and front end loaders. Any overburden will be placed in a dump truck and deposited at the perimeter of the proposed pit area. Sand will then be removed using front end loaders and stockpiled. The screener will be positioned on the base of the pit and moved to the different cells of the pit as required. (Figure 1).

3.2 Infrastructure

The McLarty Site infrastructure, as it relates to Category 12 activities, is detailed in Table 4

and with reference to the Site Plan (attached in the Issued Works Approval).

Table 4 lists infrastructure associated with each prescribed premises category.

Table 4: McLarty Site Category 12 infrastructure

	Infrastructure	Site Plan Reference
	Prescribed Activity Category 12	
1	Screener – Finlay 693	Figure 1
2	Cat D9N bulldozers	
3	Cat 966 frontend loaders	
4	Breaking up of limestone with excavator as required	
	Directly related activities	
1	Front end loaders and bulldozers (quarrying)	Figure 1
2	Refuelling truck	Figure 1
3	Generator - Electricity generation (as required)	Not depicted
	Other activities	
2	Storage compound (minor amounts of equipment)	Figure 1



Figure 1: Site plan with initial positioning of infrastructure

3.3 Exclusions to the Premises

The removal of topsoil, any overburden and the quarrying process to remove the sand product are not considered prescribed activities covered by this assessment. They are regulated via the approvals processes of DMIRS. The emission of noise from this activity is regulated under the Noise Regulations. The emission of hydrocarbons due to spills from equipment related to these activities, and dust due to material handling and vehicle movement are managed under the Unauthorised Discharge Regulations.

4. Legislative context

Table 5 summarises approvals relevant to the assessment.

Table 5: Relevant approvals and tenure

Legislation	Number	Subsidiary	Approval
<i>Mines and Petroleum Act</i>	<i>Mining tenement M70/1339</i>	<i>Carbone Bros Pty Ltd</i>	<i>Tenement held for the purpose of mining</i>
<i>Environmental Protection (Clearing of Native Vegetation) Regulation 2004</i>	<i>CPS6675 Expired 30 November 2018 – clearing was completed in this time.</i>	<i>Carbone Bros. Pty Ltd</i>	<i>Clearing of up to 18.13 ha for the purpose of road construction and mineral production.</i>

4.1 Other relevant approvals

4.1.1 Planning approvals

The activities are approved through the issuing of the mining tenement M70/139 rather than the planning approvals of the local government authorities.

4.1.2 Department of Mines, Industry Regulation and Safety (DMIRS)

DMIRS has granted the mining tenement M70/1339 with the condition 6 stating that:

“The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled:

- (MP Reg ID 56115) "Mining Proposal for the McLarty Site (Mining Lease 70/1339 and Miscellaneous Licence 70/175" dated 5 October 2016, signed by Amando Carbone and retained on Department of Mines, Industry Regulation and Safety File No. EARS-MPMLA-56115 as Doc ID 4547521;*
- (MCP Reg ID 56115) "McLarty Site - Mine Closure Plan" dated 5 October 2016 signed by Amando Carbone and retained on Department of Mines, Industry Regulation and Safety File No. EARS-MPMLA-56115 as Doc ID 4547521"*

4.2 Part V of the EP Act

4.2.1 Applicable regulations, standards and guidelines

The overarching legislative framework of this assessment is the EP Act and EP Regulations.

The regulations and guidance statements which inform this assessment are:

- Environmental Protection (Noise) Regulations 1997*
- Environmental Protection (Unauthorised Discharges) Regulations 2004*

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessments (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

4.2.2 Works approval and licence history

There have been no previous works approvals, licenses or registrations covering these premises.

4.2.3 Clearing

Clearing permit CPS 6675 was granted 11 November 2017 allowing clearing of no more than 18.13 hectares within the mining tenements M70/1339 and L70/175. This area has been cleared and no further clearing is proposed.

5. Location and siting

5.1 Siting context

Carbone Bros carried out a desktop analysis of the local ecosystem. The premises is within an area of *Pinus radiata* plantation, the McLarty pine plantation in State Forest 16. The area was cleared of native vegetation approximately 30 years ago by the State government to enable the Forest Products Commission to establish a pine plantation. The pine plantation was damaged by a large fire in 2016 and is being replanted with pine seedlings. The area is therefore heavily disturbed with little remnant native vegetation. The lack of native vegetation for more than 220m (the closest stand of native vegetation to the premises) means there is limited suitable habitat for native fauna across the Premises.

The established pine plantations have been found to be a valuable roosting and foraging resource for the endangered Carnaby Cockatoo. This species will avoid cleared land however so the clearing of the Myalup pine plantation by fire and mechanical means since 2016 makes it unlikely to be valued habitat for the endangered Carnaby Cockatoo. Pine seedling plantings to replace the fire cleared land are underway but there will be a significant delay before they can provide roosting or foraging material.

There are no Threatened or Priority Ecological Communities recorded within the Premises however the buffer zone for the Clifton-microbialite TEC buffer extends over the whole premises. There is no surface water present on the premises and no apparent water course or transfer of water from the premises with stormwater rapidly infiltrating the sand rather than running off.

The Premises is located within the Spearwood Dune System characterised by leached sands overlying yellow to reddish brown sand underlain by limestone. The soil has no known risk of acid sulphate soils.

5.2 Residential and sensitive Premises

The nearest potential sensitive receptor to the Premises is a rural property 2 km east from the nearest border of the Premises.

5.3 Specified ecosystems

Specified ecosystems are areas of high conservation value and special significance that may

be impacted as a result of activities at or Emissions and Discharges from the Premises. The distances to specified ecosystems are shown in Table 8. Table 8 also identifies the distances to other relevant ecosystem values which do not fit the definition of a specified ecosystem.

The table has also been modified to align with the *Guidance Statement: Environmental Siting*.

Table 6: Environmental values

Specified ecosystems	Distance from the Premises
Peel Harvey Environmental Protection Policy	Premises is situated within the EPP area
Threatened Ecological Communities and Priority Ecological Communities Clifton-microbiolite - <i>Stromatolite like freshwater microbialite community of coastal brackish lakes</i>	Premises is within the buffer for this community but there are no nearby located brackish lakes.
Geomorphic Wetlands A Conservation Category (CC) wetland (UFI 3535)	700m East
Biological component	Distance from the Premises
Threatened/Priority Flora Banksia Woodland	300m East

5.4 Groundwater and water sources

The distances to groundwater and water sources are shown in Table 9.

Table 7: Groundwater and water sources

Groundwater and water sources	Distance from Premises	Environmental value
Public drinking water source areas PDWSA Preston Beach Water Reserve	The edge of the reserve lies along the western edge of tenement M70/1339	A potable water source for the Preston Beach community.
Groundwater Groundwater – superficial aquifer -	9 – 10m AHD	Water is not used for potable or industrial use.

5.5 Soil type

Table 10 details soil types and characteristics relevant to the assessment.

Table 8: Soil and sub-soil characteristics

Groundwater and water sources	Distance from Premises	Environmental Value
Soil type classification Spearwood Dunes	0	Dune ridges with deep siliceous yellow brown sands or pale sands with yellow-brown subsoil and slopes up to 15%

6. Emissions

Table 9: Emissions and discharges

Source	Emission	Controls
Vehicle movements	Dust (fugitive lift off)	Water carted to site; Utilising water truck with spray bars and water cannons; Vehicle speed limitations (20 km/hr).
Extraction of sand material	Dust	Water carted to site; Water truck with sprays/cannons used at processing areas.
	Noise	Large separation distance to sensitive receptors
Loading/unloading and storage of extracted sand and stockpiled material	Dust	Water carted to site; Wetting down stockpiles using water cannons on the water truck; Reducing size of stockpiles to approximately the following day's cartage.
Screening of extracted material	Dust	Barriers including dust covers and skirts to be fitted on all processing equipment (where feasible); Water carted to site; Water truck with sprays/cannons used at processing areas.
	Noise	Large separation distance to sensitive receptors
Runoff from working areas	Sediment/particulates	Minimal slope to land. Porous sand surface makes runoff unlikely.

7. Risk assessment

7.1 Table 10. Identification of emissions, pathway and receptors during construction

Risk Event				Consequence rating*	Likelihood rating*	Risk*	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
Place of screener and associated equipment including vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity of closest human receptors: residential premises located 2km east of the prescribed operations.	Wetting down roads using water truck with spray bars and water cannons	Slight	Unlikely	Low	The minor construction works (equipment placement) are not expected to generate significant dust emissions.	N/A
	Noise		No specified controls for noise emissions				The closest human receptors are located a significant distance from the premises and are not in the direction of the prevailing wind.	

7.2 Table 11: Identification of emissions, pathway and receptors during operation

Risk Event				Consequence rating*	Likelihood rating*	Risk*	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
Excavation activities Screening activities Unloading, loading and storage of material Vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity of closest human receptors: residential premises located 2km east of the prescribed operations.	Wetting down processing areas, roads and stockpiles using water truck with spray bars and water cannons. Stockpiles limited where possible to anticipated cartage to be undertaken the following day. Fixed sprinklers on screening equipment to be used as required. Dust skirts and covers (where feasible) on processing equipment. Speed limits restricted to 20km/hr	Minor	Unlikely	Low	The closest human receptors are located a significant distance from the screening activities and are not in the direction of the prevailing wind.	N/A
	Noise	Air/windborne pathway causing impacts to health and amenity of closest human receptors: residential premises located 2km east of the prescribed operations.	Machinery fitted with mufflers and baffles Operation restricted to 7am -7pm Monday to Saturday. Speed limits restricted to 20km/hr Noise complaints register.	Minor	Unlikely	Low	The closest human receptors are located a significant distance from the screening activities and are not in the direction of the prevailing wind.	N/A

8. Consultation

The application was advertised on 19 November 2019

Method	Comments received	DWER response
Application advertised on DWER website 19/11/2019	TBC	TBC
Direct interest stakeholders notified 19/11/2019	TBC	TBC
Applicant notified of draft 9/12/2019	Comments were received from the applicant 10/12/2019 confirming the Decision Document details.	Works approval issued

9. Conclusion

This assessment of the risks of activities on the Premises has been undertaken with due consideration of a number of factors, including the documents and policies specified in this Decision Report (summarised in Appendix 1).

DWER notes that it may review the appropriateness and adequacy of controls at any time and that, following a review, DWER may initiate amendments to the approval under the EP Act.

Tim Gentle
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Regulatory Services

Delegated Officer under section 20 of the *Environmental Protection Act 1986*

Appendix 1: Key documents

Document title	In text ref	Availability
McLarty Site Works Approval Application (Mining Lease 70/1339) Accendo Australia , 11 July 2019	Accendo Australia, 2019	DWERDT178252
Carbone Bros Pty Ltd – Accendo Australia – McLarty Site – Works approval application – Response to request for further information, 16 August 2019	Accendo Australia, 2019a	DWERDT190276
DER, July 2015. <i>Guidance Statement: Regulatory principles.</i> Department of Environment Regulation, Perth.	DER 2015a	accessed at www.dwer.wa.gov.au
DER, November 2016. <i>Guidance Statement: Risk Assessments.</i> Department of Environment Regulation, Perth.	DER 2016	
DER, June 2019. <i>Guidance Statement: Decision Making.</i> Department of Environment Regulation, Perth.	DER 2019c	