

JOINT REGIONAL PLANNING PANEL (Western Region)

JRPP No	2015/WES001
DA Number	3/2015
Local Government Area	Broken Hill City Council
Proposed Development	Extractive Industry
Street Address	1 Holten Drive, Broken Hill
Applicant/Owner	E.B Mawson & Sons Pty Limited
Number of Submissions	0 public submissions
Regional Development Criteria (Schedule 4A of the Act)	An extractive industry that is not State Significant development.
List of All Relevant s79C(1)(a) Matters	<ul style="list-style-type: none"> • List all of the relevant environmental planning instruments: s79C(1)(a)(i) • List any proposed instrument that is or has been the subject of public consultation under the Act and that has been notified to the consent authority: s79C(1)(a)(ii) • List any relevant development control plan: s79C(1)(a)(iii) • List any relevant planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F: s79C(1)(a)(iv) • List any coastal zone management plan: s79C(1)(a)(v) • List any relevant regulations: s79C(1)(a)(iv) eg. Regs 92, 93, 94, 94A, 288
List all documents submitted with this report for the panel's consideration	Assessment report, with recommended conditions of consent. Responses From Government agencies.
Recommendation	Approval subject to conditions.
Report by	Broken Hill City Council.
Report date	28/9/2015

Assessment Report
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1.0 INTRODUCTION

1.1 Executive Summary

E.B. Mawson and Sons Pty Ltd is the proponent for this development.

E.B. Mawson & Sons Pty Limited (the Applicant) to assess the potential environmental impacts of the Applicant's proposal for the continued and expanded extraction activities, and the continued use of its concrete batching plant and landscape supplies business at its Broken Hill Quarry.

The proposed continued and expanded use of the Quarry is "designated development" within the provisions of Schedule 3(1) of the *Environmental Planning and Assessment Regulation 2000* because the extraction area exceeds the 2ha threshold area for an extractive industry and the proposed production and transportation of up to 350 000t of materials per year exceeds the 30 000m³ per year threshold. As a result, an *Environmental Impact Statement* (EIS) must accompany the development application. This document has been prepared in satisfaction of that requirement. In addition, Clause 20 of *State Environmental Planning Policy (State and Regional Development) 2011* ("State and Regional Development SEPP") identifies designated development for an extractive industry that is not State Significant Development as "Regional Development". As a result, the Proposal may be classified as "Regional Development" and, under Clause 21 of the State and Regional Development SEPP, is to be determined by the Joint Regional Planning Panel.

The Proposal is also recognised as "integrated development" under Section 91 of the *Environmental Planning and Assessment Act 1979* as an additional approval, namely an Environment Protection Licence, is required to operate the quarry.

The application was notified for a period of thirty (30) days. No submissions were received as a result of the public notification.

Referrals were sent to external agencies for comments, including the Department of Primary Industries (Office of Water); Roads and Maritime Services; Trade and Investment (Crown Lands); Trade and Investment (Resources and Energy). Referral was sent to the Environment Protection Authority as an Integrated Body for General Terms of Approval.

Outcome from the referrals was that generally, no objections to the proposal were received from the external agencies. A few points raised by namely RMS and Office of Water can be suitably addressed as conditions of consent. General Terms of Approval were received from the EPA.

Based on the Section 79C assessment detailed in this report, the development application is recommended for approval subject to the conditions provided in draft format for the consideration of the Western Region Joint Regional Planning Panel.

1.2 Scope of this report

This report has been prepared to provide an overview of the proposal and the statutory assessment procedure used during the processing of the development application. An assessment of the key issues of the development is then provided.

1.3 The Development

The Proposal comprises the following components:

- Continued extraction of up to approximately 350 000 tonnes per annum (tpa) of material using drill and blast techniques from the existing and proposed extraction areas.
- Continued processing of extracted material to produce a range of quarry products including road bases of various classifications, aggregates, rail ballast and fill.
- Continued use of a concrete batching plant, including importation of select raw material, including sand, cement and other products.
- Continued operation of the existing landscape supplies business to provide the community of Broken Hill with a range of quarrying and landscaping products sourced from both on and off site.
- Transportation of quarry and other products from the Site via Holten Drive and Eyre Street using rigid trucks, truck and dog trailers, semi-trailers and B-doubles and road trains.
- Transportation of quarry products by rail from a rail load-out facility located to the northeast of the Eastern Extraction Area or from a rail ballast stockpile area located to the north of the Eastern Extraction Area.
- Rehabilitation of the Project Site to create a final landform that is safe, stable, secure and on-polluting and suitable for a final land use of nature conservation and water storage.

The applicant believes that the existing Quarry has operated since approximately 1946 for the extraction of road construction materials, rail ballast, concrete aggregates and landscape supplies. The Applicant purchased the Quarry in February 2010 and since that date production has increased from around 100 000 tonnes per annum (tpa) to approximately 250 000tpa whilst fulfilling a large rail ballast contract which is now complete.

In the future, the Applicant has advised that production at the quarry will average approximately 150 000tpa and that maximum production is unlikely to exceed 350 000tpa.

Given the age of the Quarry, the Applicant contended that its continued operation at its pre-2010 extraction rate of 100 000tpa would be covered under the “continuing use rights” provisions of the *Environmental Planning and Assessment Act 1979*.

However, Broken Hill City Council advised Mawson’s in March 2012, that the current operation no longer complied with the requirements for continuing use rights and that development consent would need to be sought. The result is the Applicant submitting this development application to seek approval for the continued operation of the Quarry.

The life of the proposal is 30 years.

Extraction of Friable Material:

Following removal of vegetation and any usable soil resources from areas that have not previously been disturbed, friable material would continue to be extracted using free dig techniques. This involves pushing or ripping material using a bulldozer and loading it into haul trucks or directly into a mobile crusher within the extraction area. The Applicant advised that only very limited volumes of material is suitable to be extracted using this technique.

Drill and Blast Operations:

Material that is too competent to be extracted using free dig techniques would continue to be extracted using drill and blast techniques. In summary, drill and blast operations require a series of near vertical holes to be drilled. These are loaded with suitable explosives, boosters, detonators and stemming material. On average, each production blast would fragment between approximately 20 000t and 50 000t of material. At a proposed average production rate of 150 000tpa, this would require between four and six production blasts per year. In its EIS, the applicant outlined that they

wish for Hours of blasting to be between 9am and 5pm Monday to Saturday. The EPA General Terms of Approval have conditioned the Blasting times to be 9am to 3pm Monday to Friday.

Processing Operations:

Processing operations would continue to be undertaken in a similar manner to the existing operations, and would include the use of the following.

- The existing fixed crushing and screening plant.
- Intermittent use of a mobile crushing and screening plant within the extraction areas as required.
- The existing wash plant to produce aggregates largely free from dust or silt contamination.
- The existing precoat plant to produce pre-coated products for road sealing operations.
- Proposed hours of operation 7am to 10pm, 7 days a week.

Concrete Batching Operations:

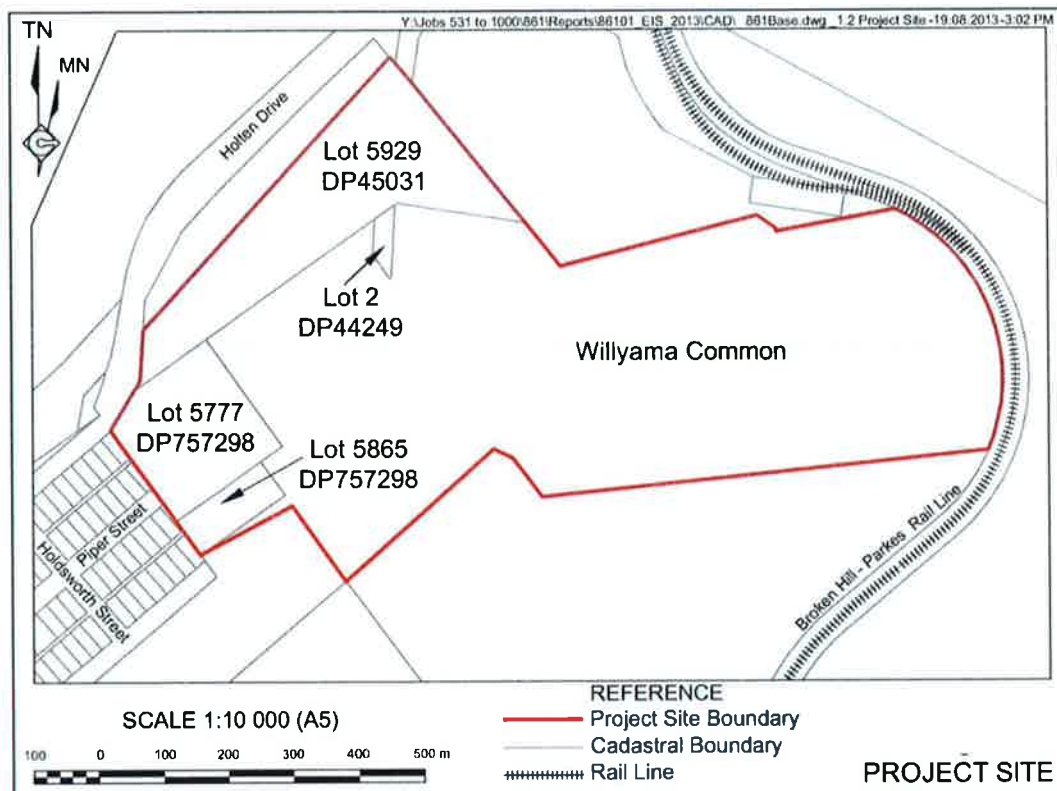
The concrete batching operations comprise the following components.

- A cement silo and hopper
- An aggregate hopper and conveyor.
- Aggregate storage bays.
- A batch plant office.

The concrete batching plant produces an average of approximately 14 000m³ per year, of batched concrete product with a maximum of approximately 20 000m³. This rate of production would continue. Proposed hours of operation – 24 hours a day.

Landscape Supply Operations

The Applicant operates a landscape supplies business in the western section of the Site. The business supplies a number of landscape products such as sands, soils gravels, mulch, manure and cement to the public, businesses and government agencies. This would continue. Hours of operation 8am to 5pm Monday to Saturday.



SITE MAP
Source: EIS (R.W. Corkery & Sons)

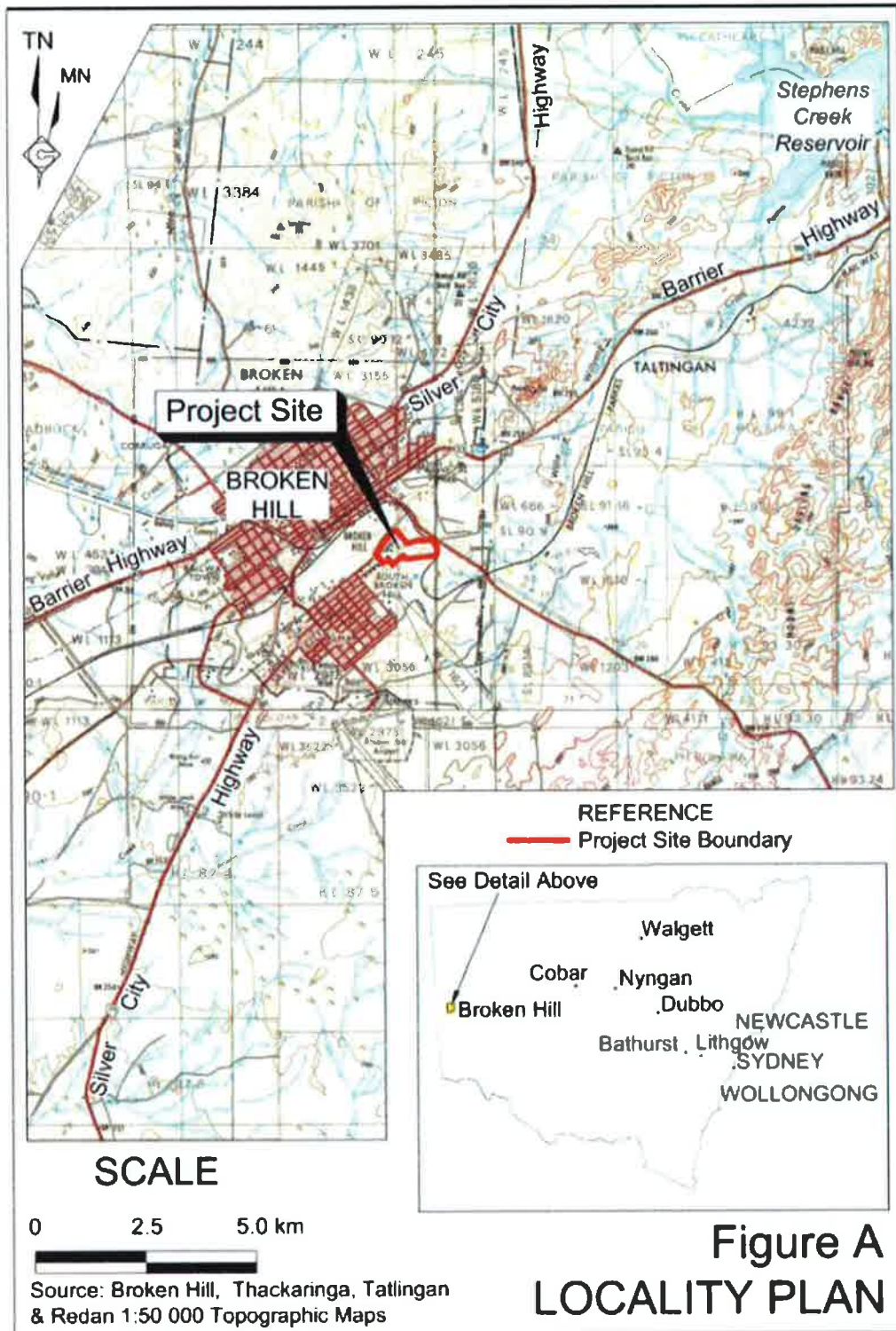
1.4 Site description and surrounding land use and development context

The Project Site covers a total area of approximately 58ha. The majority of the Site is located within the Willyama Common, which is held by the NSW Department of Trade and Investment (Crown Lands) and managed by Broken Hill City Council. A small parcel of land near the centre of the Site is owned by the State of NSW. Extraction operations within the northern extraction area are located within land which is owned by the Applicant.

A number of residences are located in relative close proximity to the Site. The closest residence (at 423 Piper Street) is approximately 60m to the west of the Sites boundary.

Land uses in the vicinity of the Site include the following:

- Mining activities associated with the Rasp Mine located on the northern side of Holten Drive. This includes large waste rock emplacements (known locally as the Line of Lode) which are highly visible from the surrounding area.
- Low density residential development immediately to the west of the Site and approximately 600m southwest of the Site. Residential and commercial development (the main street/CBD area) is approximately 800m to the north of the Site (to the north of the Line of Lode).
- A rail load out facility owned by the Australian Rail Track Corporation and used by Mawsons to load quarry products along the eastern boundary.
- The South Broken Hill Golf Course to the south of the Site.
- Transportation infrastructure, including the Broken Hill – Parkes Railway, Menindee Road, Holten Drive and Eyre Street.



2.0 STATUTORY DEVELOPMENT ASSESSMENT FRAMEWORK

2.1 Legislation

Environmental Planning and Assessment Act 1979

Approval to undertake development in NSW is governed by the *Environmental Planning and Assessment Act 1979* (EP&A Act). As identified in Section 3.3.1, land within the Project Site is zoned Zone SP1 Special Activities (Mining and Extractive Industry) under the *Broken Hill Local Environmental Plan 2013*.

Extractive industries are permitted with development consent within this zone. As a result, development consent under Part 4 of the EP&A Act will be required.

The Proposal is both integrated and designated development. General terms of approval were requested and received from the relevant approval agency (being EPA).

In accordance with Section 79 and 79A of the EP&A Act the development application was publicly exhibited for a period of thirty (30) days. No public submissions were received.

Protection of the Environment Operations Act 1997

Section 48 of the Act requires any occupier of a premise to undertake scheduled activities if an appropriate licence is held for that premises.

Paragraph 19 of Schedule 1 of the POEO Act identifies that extractive industries that extract more than 30 000t of materials per year require an Environment Protection Licence. As the Proposal would result in extraction of up to 350 000t per annum of material, an Environment Protection Licence is required. It is intended that its existing licence, namely EPL 11840, be amended to take into account the proposed activities.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

Pursuant to Clause 18A the proposal is identified as designated development as it is:

- Extractive industry located in the Western Division, and
- Obtain or process for sale, or reuse more than 40,000 cubic metres in total.

2.2 Chronology of events and public notification and statutory referrals

DA lodged	Lodged 13 January 2015
DA advertised, site signposted	17 January 2015
Newspaper notices	17 January 2015; 21 January 2015; 4 February 2015
Period of public notification	17 January 2015 to 18 February 2015
Referral agency letters	Environment Protection Authority; Department of Primary Industries (Office of Water); Roads and Maritime Services; Trade and Investment (Crown Lands); Trade and Investment (Resources and Energy).

3.0 SECTION 79C ASSESSMENT

Section 79C

(a)(i) Environmental Planning Instruments

3.1 Broken Hill Local Environmental Plan 2013

The site is located within the SP1 Special Activities Zone. The development is defined as ‘Extractive Industry’ and is a development permitted with consent.

extractive industry means:

the winning or removal of extractive materials (otherwise than from a mine) by methods such as excavating, dredging, tunnelling or quarrying, including the storing, stockpiling or processing of extractive materials by methods such as recycling, washing, crushing, sawing or separating, but does not include turf farming.

extractive material means:

sand, soil, gravel, rock or similar substances that are not minerals within the meaning of the *Mining Act 1992*.

The following provisions apply:

- Clause 1.2: Aims of plan
- Clause 2.3: Zone objectives and land use table
- Clause 2.3 subclause 1: land use table
- Clause 5.10 Heritage conservation

<i>Clause 1.2 Aims of plan</i> <i>This plan aims to make local environmental planning provisions for land in Broken Hill in accordance with the relevant standard environmental planning instrument under section 33A of the act.</i>	
<i>(a)</i> to encourage sustainable economic growth and development in Broken Hill.	Proposal complies.
<i>(b)</i> to encourage and provide opportunities for local employment growth, and the retention of the population, in Broken Hill	Proposal complies.
<i>(c)</i> to encourage the retention of mining and acknowledge that industry’s heritage and regional significance	Proposal complies.
<i>(d)</i> to identify, protect, conserve and enhance Broken Hill’s natural assets	Existing disturbed site.

<p>(e) to identify and protect Broken Hill's built and nationally significant cultural heritage assets for future generations</p> <p>(f) to provide for a range of housing types and living opportunities</p> <p>(g) to allow for the equitable provision of services and facilities for the community</p> <p>(h) to provide for future tourist and visitor accommodation in a sustainable manner that is compatible with, and will not compromise, the natural resource and heritage values of the surrounding area</p>	<p>Existing disturbed site. The site is not Heritage listed or within a Heritage Conservation Area.</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>
<p>Clause 2.3 Zone objectives and land use tables The consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within the zone</p>	<p>The development has been assessed in accordance with the relevant SP1 zoning. The assessment considers that the development is consistent with the SP1 objectives.</p>
<p>Clause 2.3 subclause 1 Objectives of zone Objectives are as follows:</p> <p>To provide for special land uses that are not provided for in other zones.</p> <p>To provide for sites with special natural characteristics that are not provided for in other zones.</p> <p>To facilitate development that is in keeping with the special characteristics of the site or its existing or intended special use, and that minimises any adverse impacts on surrounding land.</p>	<p>Relevant zoning is SP1 (Mining and Extractive Industry). The intent of this zone is clearly to provide for "Mining and Extractive Industry".</p> <p>N/A</p> <p>N/A</p>
<p>Clause 5.10 Heritage conservation The objectives of this clause are as follows:</p>	

(a) to conserve the environmental heritage of Broken Hill	Proposal does not impact adversely on environmental heritage of the city
(b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views	No heritage items located on site, and site is not within a Heritage conservation area.
(c) to conserve archaeological sites	N/A
(d) to conserve Aboriginal objects and Aboriginal places of heritage significance.	Four indigenous sites were recorded during the consultants heritage assessment. The Proposal would not result in any disturbance of these sites.

3.2 State Environmental Planning Policies

SEPP (Mining, petroleum production and Extractive Industries) 2007

The proposed development is defined as an Extractive Industry and therefore this policy applies to the assessment of the development. The clauses of the SEPP relevant to the assessment of the application are outlined below, with comments provided as to how the development satisfies the requirements.

13 Compatibility of proposed development with mining, petroleum production or extractive industry

Consideration is given to whether the development is likely to have a significant impact on current or future mining, petroleum production or extractive industry and ways in which the development may be incompatible.

Measures taken by the applicant to avoid or minimise any incompatibility are considered.

The public benefits of the development and any existing or approved mining, petroleum production or extractive industry must be evaluated and compared.

Net positive socio-economic benefit through production of products required to service the local and regional market with minimal negative impacts on residences or the environment surrounding the Project Site.

Clause 14: Natural resource management and environmental management

Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner.

<p>Consideration is given to ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure:</p> <p>impacts on significant water resources, including surface and groundwater resources, are avoided or minimised;</p> <p>impacts on threatened species and biodiversity are avoided or minimised; and</p> <p>greenhouse gas emissions are minimised and an assessment of the greenhouse gas emissions (including downstream emissions) of the development is provided.</p>	<p>Groundwater inflow is likely to occur only immediately following rainfall.</p> <p>The Proposal is unlikely to result in drawdown of surrounding groundwater levels or adverse impacts on surrounding groundwater users surrounding the Site.</p> <p>All surface water run off would be directed towards existing water management structures which would continue to be maintained to an appropriate standard.</p> <p>No TSC listed species, populations or communities were identified as being affected by the Proposal.</p>
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Clause 16: Transport

<p>The following transport related issues are considered.</p> <p>The transport of some or all of the materials from the site by means other than public road.</p> <p>Limitation of the number of truck movements that occur on roads within residential areas or roads near to schools.</p> <p>The preparation of a code of conduct for the transport of materials on public roads.</p>	<p>The existing roads and intersections along the routes to/from the Project Site have ample capacity to cater for the traffic generated by the Proposal.</p> <p>RMS have suggested a condition of consent be imposed which states that the proponent, in consultation with Broken Hill City Council, is to prepare and implement a code of conduct relating to transport of materials on public roads.</p>
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Clause 17: Rehabilitation

<p>Before granting consent for development for the purposes of mining, petroleum, production or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring the rehabilitation of land that will be affected by the development.</p>	
<p>The rehabilitation of the land affected by the development is considered including:</p> <p>preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated;</p> <p>appropriate management of development generated waste;</p> <p>remediation of any soil contaminated by the development; and</p> <p>steps to be taken to ensure the state of the land does not jeopardise public safety, at the completion of rehabilitation.</p>	<p>The Applicant, in the EIS submitted with the DA noted that "the Applicant would remain responsible for the ongoing management of the final landform".</p> <p>Following completion of quarry-related activities, all equipment and other infrastructure such as the site amenities facilities would be removed from site. The area of the Project Site used for processing and stockpiling would then be deep ripped</p>

	<p>and subsoil and topsoil spread, if required. This area would be planted with vegetation reflective of the surrounding environment. The final decision relating to the final land use for Quarry would be made towards the end of the operating life of the Quarry, and would be in conjunction with Broken Hill City Council, the NSW Department of Trade and Investment, Crown Lands, and any other relevant government agencies.</p>
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SEPP No. 33 (Hazardous and Offensive Development)

State Environmental Planning Policy No. 33 –Hazardous and Offensive development (SEPP33) is an enabling instrument that aims to ensure the merits of a proposal are properly assessed prior to determination (NSW Government Department of Planning 1994).

potentially hazardous industry means a development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:

- (a) to human health, life or property, or
- (b) to the biophysical environment,

and includes a hazardous industry and a hazardous storage establishment.

potentially offensive industry means a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment.

The EIS noted that the Proposal may involve the storage of small amounts of hydrocarbons including, unleaded petrol, lubricating oils and grease, and diesel. As the hydrocarbons would not be stored adjacent to any other hazardous materials of the same class, DUAP (1997) does not require these to be considered further.

In addition, detonators, boosters and bulk explosives would be brought to site of the day of the blast and would not be stored within the Project Site.

As a result, Council agrees with the applicant that the Proposal would be unlikely to be considered potentially hazardous under this SEPP.

As such, there was no requirement to undertake a Preliminary Hazard Analysis for the Proposal.

Section 79C

1(a) (ii) Draft Environmental Planning Instruments

3.3 Proposed Instrument

There are no draft environmental planning instruments to be considered in this assessment.

3.4 Broken Hill City Council Development Control Plan No 4 Industrial

The DCP does not have specific clauses relating to this type of proposal (extractive industries).

However the DCP does note three industrial precincts in Broken Hill. One of these precincts is the Eyre Street Industrial Precinct, of which this site falls within. One clause relating to this precinct states:

Eyre Street Precinct

Objectives of Eyre Street Precinct

- to encourage appropriate industrial development within the precinct; and
- to ensure industrial developments do not have an adverse environmental impact on nearby residential land use.

Another relevant clause which should be applied is that Car parking space shall be provided on site for employees, visitors and company vehicles and shall be calculated at the rate of:

- 1 space per three (3) employees.

In this case, a condition could be imposed requiring that a total of minimum of 8 spaces be provided (based on 24 employees). Space is currently available near the site office where staff and visitors do park, however it is suggested that this should still be a condition of consent that the spaces are provided and signposted.

4.0 SECTION 79C

1 (B) AND (C) – LIKELY IMPACTS OF THE DEVELOPMENT AND SUITABILITY OF THE SITE FOR THE DEVELOPMENT

The EIS addressed the likely impacts of the development on the environment and the measures to mitigate any effects.

4.1 Flora and Fauna

Flora:

OzArk Environmental & Heritage Management Pty Limited (OzArk) were commissioned by R.W. Corkery and Sons who prepared the EIS. They undertook an assessment on the flora and fauna present within the Site and the impact of the proposed increase in the Quarry's footprint.

They found that the pattern of vegetation across the Project Site is relatively predictable given the general landform / topography tied and widely represented communities in the region and the cumulative effects of historic disturbance.

The remnant vegetation within the Ecology Study Area may be classified as "Mulga - Dead Finish on stony hills mainly of the Channel Country and Broken Hill Complex Bioregions vegetation community".

In terms of species composition / diversity / richness, OzArk, 2013, concluded that this is not an unusual result in the Broken Hill region.

Fauna:

Eighteen species of birds, four species of mammals (only one native) and four species of reptiles were recorded during the site survey. No species of microbats were recorded using AnaBat equipment during the site survey; however two species were seen flying around floodlights in a built up area adjoining the Ecology Study Area.

No threatened species were recorded in the Site, none were considered to be present and remain undetected.

Council considers that there are no concerns regarding possible adverse impact on flora and fauna.

4.2 Traffic, Roads and Access

The Quarry is a significant supplier of rail ballast for rail construction and maintenance operations on the main east west rail line between the New South Wales, South Australia and Western Australia.

Rail transportation is undertaken by organisations other than the Applicant under approvals held by those organisations. As a result, information provided in this subsection is provided for information purposes only and does not comprise an activity for which development consent is sought.

In summary, the Applicant would continue to transport rail ballast from the Project Site using road trucks via the rail load-out facility and the rail ballast stockpile entrances. That material would either be transported directly to the rail load-out facility and loaded directly into rail wagons or it would be transported to the rail ballast stockpile area for later loading into rail wagons using one or more front-end loaders. Both the rail load-out facility and the rail ballast stockpile area are on land controlled by the Australian Rail Track Corporation. That land is used by the Applicant with the permission of the Corporation.

Traffic assessment undertaken for the Applicant by consultants Traffic Solutions (2013) identified the following:

- The site has ample area to provide all necessary car and truck parking areas.
- The existing roads and intersections used by vehicles accessing the Site have ample capacity to cater for the traffic generated by the Proposal.

Road Transportation:

Site Entrances

Transportation of quarry products from the Project Site and delivery of raw material to the Project Site would be undertaken via the existing site entrance from Holten Drive. Access to the landscape supplies business from Holten Drive is located approximately 30 metres to the west of the main access to the Quarry.

Traffic Solutions (2013) has undertaken an assessment of the traffic-related aspects of the Proposal and notes the following in relation to the site entrance. The intersection between Holten Drive and the Site entrance has a sight distance of more than 200m in both directions. The intersection operates with a Level of Service A (very good) and would continue to do so.

Other access points to the Project Site include the following. The landscape supplies entrance landscape supplies customers to access the landscape supplies yard. The rail load-out facility entrance this entrance is used by the Applicant to transport quarry products to be transported via the rail load-out facility within Australian Rail Track Corporation-controlled land. The rail ballast stockpile entrance this entrance is used by the Applicant to transport quarry products to the rail ballast stockpile area within Australian Rail Track Corporation-controlled land.

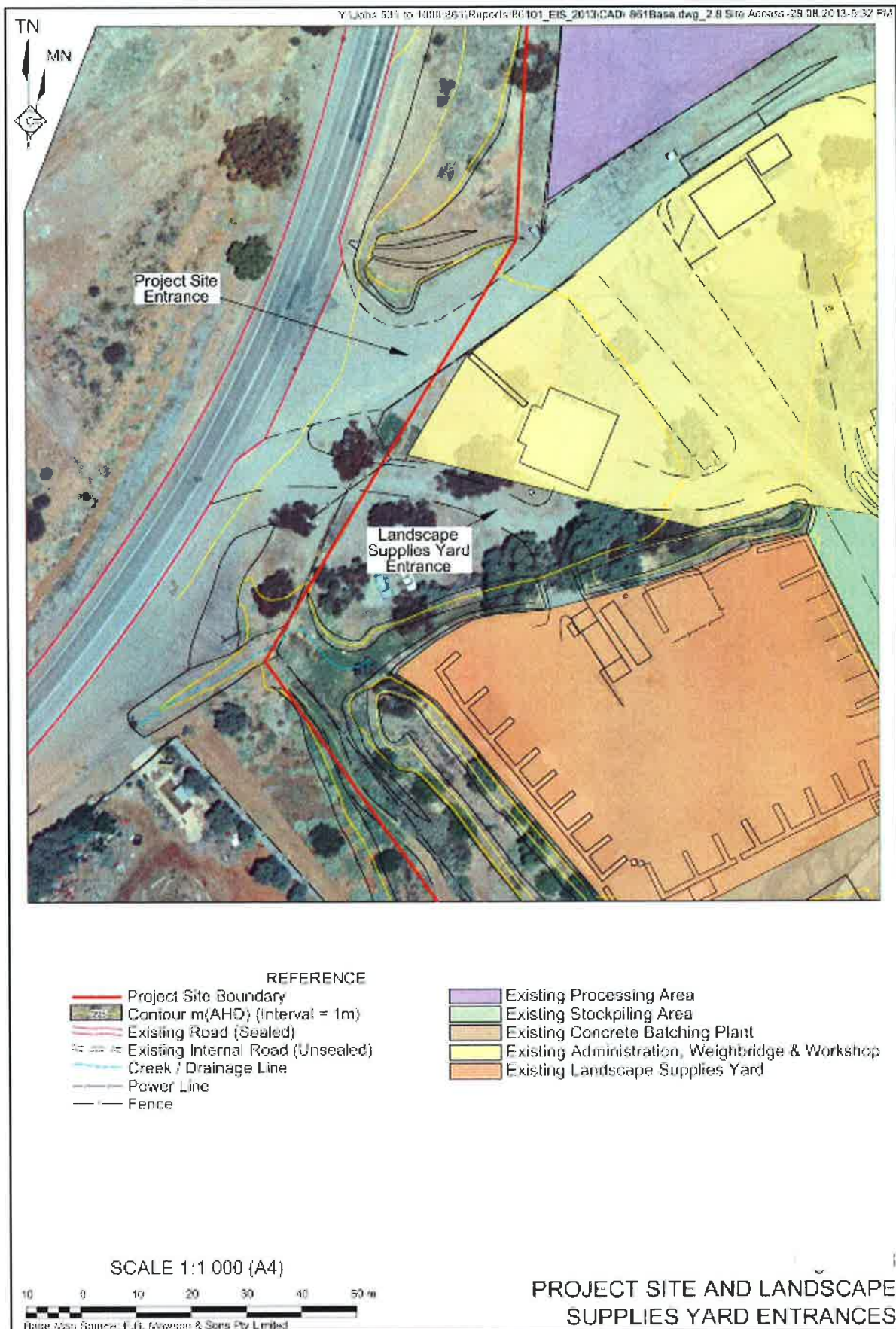
All site entrances would continue to be locked when not in use and access to the Project Site other than via these entrances would continue to be restricted through the use of a perimeter fence.

External Road Network and Transportation Routes:

The Applicant proposes that the ongoing distribution of products from Quarry via road would be undertaken in a manner similar to the existing product distribution. In summary, all products would be transported using heavy vehicles via the Project Site entrance onto Holten Drive. Approximately 75% of heavy vehicles would turn left and travel southwest along Holten Drive, with the remaining 25% turning right and travelling northeast.

In summary, quarry-related heavy vehicles may use the following transportation routes Northeast-bound traffic on Holten Drive: turn left onto Menindee Road and travel to the Barrier Highway for locations within the eastern section of Broken Hill or to the east (via the Barrier Highway) or northeast (via the Silver City Highway) of Broken Hill; or turn right onto Menindee Road for locations to the southeast of Broken Hill. Southwest-bound traffic on Holten Drive may: turn right and enter the Rasp Mine Site; turn left into Comstock St for locations within Alma or to the south and southwest of Broken Hill, including the South Mine (via the Silver City Highway); or turn right onto the Silver City Highway for locations within the western section of Broken Hill or to the west (via the Barrier Highway), northwest (via Silverton Road) or north (via Nine Mile Road) of Broken Hill.

Heavy vehicles transporting materials to the Site would continue to do so via Holten Drive, with the routes used to access Holten Drive dependent on the source of the material being delivered.



Source: EIS (R.W. Corkery & Sons)

Heavy Vehicle Traffic Levels:

Heavy vehicles that would continue to be used to deliver raw materials to the Site and quarry products to customers include Rigid Trucks, Truck and dog trailer, Semi-trailer, B-double truck, Road Train, Concrete agitator trucks, and Cement trucks.

The Applicant anticipates that the average capacity of heavy vehicles delivering Quarry products would continue to be approximately 35t. In addition, the average capacity of agitator trucks delivering concrete products would continue to be approximately 10t.

Proposed Heavy Vehicle Traffic Movements

Product	Average production	Maximum production	
	Average Daily Movements	Average Daily Movements	85th percentile Hourly Movements
Quarry products	40	100	20
Concrete products	32	120	12
Raw materials delivery	4	20	2
TOTAL	76	240	34
Note: 1 return trip = 2 movements			
Source: EIS (R.W. Corkery & Sons)			

Light vehicle movements, including employees own personal vehicles, and vehicles accessing the landscape supplies yard, would be in the vicinity of 100 movements per day.

Roads and Maritime Services (RMS) were consulted by Council of the Application and reviewed the application and accompanying EIS.

RMS advised Council that they will not object to the development and provided the following recommended conditions for consideration:

- The existing site access to Holten Drive is to be treated to include a Basic Left Turn Treatment (BAL) and Channelised Right Turn Treatment Short (CHRs) in accordance with Figures 8.2 & 7.6 *Austroads Guide to Road Design:Part 4A* respectively. Both treatments will need to be sealed and built for a 60km/h speed environment.
- Safe Intersection Sight Distance requirements outlined in the *Austroads Guide to Road Design Part 4A* and relevant Roads and Maritime Supplements is to be provided at the site access to Holten Drive. For a 60 km/h speed zone the minimum SISD is 125 metres.
- To provide suitable storage capacity for the largest class of vehicle accessing the proposed extractive industry, and gate, grid or similar structure installed in the access is to be setback appropriately (40 metres for road trains) from the edge of Holten Drive.
- The proponent, in consultation with Broken Hill City Council, is to prepare and implement a code of conduct relating to transport of materials on public roads as part of the considerations under Clause 16(1) of *SEPP (Mining, Petroleum Production and Extractive Industries) 2007*.

Council agrees that these conditions are reasonable to be imposed on a consent for the development.

4.3 Noise

The noise assessment undertaken by ERM (2013) identified the following:

- Residences to the west of the Processing Plant Area currently and would continue to receive noise levels up to 52dB(A). Mawson's have discussed the existing noise levels with the owner of the closest residence. No noise related complaints have been received (either by Mawson's or by Council) to date.
- Mawson's have committed to a range of noise reduction measures that would be implemented progressively to reduce noise emissions from the Site.
- Road traffic noise levels are expected to be below the relevant criteria for all residences along the identified transportation routes. The transport routes are currently utilised by heavy vehicle traffic from industrial and mining sites additional to Mawson's.

A key component of the acoustic assessment was to understand the existing noise environment at the closest or potentially most affected properties in the vicinity of the site.

Both unattended and attended monitoring took place.

During continuous unattended environmental noise logging, data was recorded at 15 minute intervals over the measurement period.

As a result of the unattended monitoring, the overall rating background noise level (RBL) and LAeq values for each monitoring location are summarised in the Table below.

NML1 is the closest residence to the Site (known as 423 Piper Street). NML2 is known as 283 Eyre Street.

Summary of Unattended Noise Monitoring Results

Location	Measured Existing Noise Levels dB(A)					
	RBL Day	RBL Evening	RBL Night	L _{Aeq} Day	L _{Aeq} Evening	L _{Aeq} Night
NML1	36	31	31	50	45	45
NML2	36	32	30	58	54	52

Source: ERM (2013 – Table 3.3)

Attended noise measurements were carried out both within the Site, to characterise noise sources, and off-site at the two nearby locations (known as NML1 and NML2).

Measurements were taken to allow source identification and characterisation of the ambient noise environment.

At NML1, the closest residence to the Site boundary, noise from the Site during the day was generally comparable to noise from other sources (e.g. the Rasp Mine to the north, traffic on Eyre Street and Holten Drive). Similar levels were observed during the evening, with the exception of occasional noise events (generally bucket impact noise) associated with the front-end loader placing material into hoppers at the concrete batch plant.

At NML2, the dominant source of noise is existing public road traffic on Eyre Street, with some contribution from the Rasp Mine to the northwest. The only noise due to the Quarry noted at this location (and for other residences along Eyre Street) is due to passing trucks.



REFERENCE

- Project Site Boundary
- Rasp Mine Boundary
-  Noise Quality Monitoring Location
-  Plate Location & Identifier

SCALE 1:20 000 (A4)



**SURROUNDING LAND USE AND NOISE
QUALITY MONITORING LOCATION**

4.4 Hazards

Bushfire:

The site is not in a bushfire prone area. The site is a highly disturbed site and as such features very little vegetation.

Flooding:

The site is not identified as being floodprone in the EIS and is has not been by Council as being flood prone land.

Stormwater will be retained on site, due to the porous nature of gravel stormwater infiltrates quickly through the soil profile.

Waste management:

Any waste generated from the site will be contained and removed from the site for safe disposal.

4.5 Soil, Geological and Erosion

Soils within the Site are generally absent or highly disturbed, reflecting the intensity of past land use practices.

Land Capability is determined based upon the classification system of the former New South Wales Soil Conservation Service (Emery, 1986).

The Land Capability of the existing extraction areas and processing areas is classified Class M, or land *"affected by mining or quarrying."* Other areas within the Project Site are classified as Class VIII or *"land incapable of sustaining agricultural production"*.

The Applicant, in the EIS, advised that they would implement the following safeguards and mitigation measures to minimise potential for adverse soil-related impacts within and surrounding the Site.

- Clearly defined areas of disturbance ahead of any required soil stripping activities.
- Strip soil initially to a depth of between approximately 100mm and 400mm where practical.
- Ensure that the area to be stripped is the minimum required for operations within any two year period.
- Ensure that direct replacement of the stripped soil is undertaken, where practicable.
- Ensure that all soil not directly transferred following stripping would be placed in stockpiles less than 2m high.
- Ensure that any soil stockpiles created are positioned where they would not be impacted by surface water runoff. Alternatively, diversion channels would be created upslope of any soil stockpile to divert surface water runoff away from the stockpile.

Council considers that there are no soil or erosion matters which would prevent Development consent being able to be granted.

4.6 Air Quality

Potential sources of air emissions from the development were identified as follows.

- Extraction of rock material from the extraction areas.
- Tipping of rock to the hopper and hopper pad.
- Wheel generated dust from unpaved roads (including hauling of extracted rock, processed material and material deliveries).
- Blasting and drilling activities in the extraction areas.

- Transfer and processing of extracted rock within the processing plant, including crushing, screening, conveyor transfer points and stockpile loading.
- Wind erosion of exposed surfaces.
- Concrete batching plant operations.

The Applicant noted in its EIS that Mawson's would implement the following safeguards and mitigation measures to minimise the potential for air quality-related impacts surrounding the Site:

- Continue to water as required and control vehicle speeds on unpaved roads within the Project Site.
- Where practicable, maintain dust controls on all fixed and mobile processing equipment, including water sprays, cladding and foam additives.
- Manage dust lift off from exposed surfaces, including watering of active stockpiling areas and progressive rehabilitation of completed areas.

The potential air quality impacts associated with the development were assessed as part of the EIS. Dispersion modelling was conducted. The results from the dispersion modelling conducted showed that there is unlikely to be an adverse cumulative impact upon the surrounding area. The modelling showed that the proposed expanded operations at Mawson's would not significantly alter the existing contribution of the site's activities to particulate matter concentrations and dust deposition rates.

The General Terms of Approval issued by the EPA include conditions relating to "Dust", which are aimed at ensuring that activities occurring at the site are carried out in a manner that will minimise emissions of dust from the premises.

4.7 Water resources

The Site is located within the catchment of the Stephens Creek Reservoir and, in the headwaters of the Willa Willyong Creek, which flows from an area to the southeast of Broken Hill to the Stephens Creek Reservoir. Surface waters surrounding the Site flow via a series of poorly defined, drainage lines to Willa Willyong Creek.

The Stephens Creek Reservoir is one of the four storage reservoirs for Broken Hill.

Site Drainage:

The extraction areas occupy the northern and eastern sections of the Site, with all water captured within the extraction areas retained on site. The far eastern section of the Site falls to the southeast, with surface water flows outside the existing extraction area entering the drainage system adjacent to the rail line which runs along the eastern boundary of the Site. Surface water flows within the processing areas, including the area of the concrete batching plant flow to a drainage line running through the centre of this area and are directed to a small sediment pond before flowing into an unnamed creek to the south of the site.

Council believes that there should be no impacts on ground water and no impacts anticipated because of surface water. As the extraction areas would only capture direct rainfall and would not receive significant groundwater inputs, the continuation and expansion of the quarry's activities would not result in significant quantities of water accumulating in the extraction areas. Surface water runoff would be directed towards existing water management structures which would continue to be maintained.

4.8 Visual Impact

The Site is an existing operating Quarry and therefore is already highly disturbed or modified.

The Site is visible from the residences area to the west of the Project Site, particularly from residences located in an elevated position in the vicinity of Piper Street (see photograph below).

All views of the existing quarry operations are in the context of a highly modified landscape dominated by the waste rock emplacements (the Line of Lode) associated with the past and present mining operations in the immediate area.

Approval of this Application will not result in any change to visual impact in the area.



**View looking southwest of the Project Site with residences in the background
(along the hill in particular)**

Source: EIS (R.W. Corkery & Sons)

4.9 Aboriginal Cultural and European Heritage

Four indigenous sites were recorded during the consultants heritage assessment. Two were recorded as open site complexes (comprising a cluster of site evidence), one isolated find (a stone axe), and one Aboriginal quartz quarry. The Proposal would not result in any disturbance of these sites.

None of the Aboriginal sites recorded as part of the survey had an apparent relationship to known historic Aboriginal sites (such as missions or massacre sites), of which there are none situated in the immediate vicinity. As such, all sites recorded have been assessed preliminarily as holding low historic value.

4.10 Social and Economic Impact

The Applicant has stated that the Quarry will continue to provide employment at approximately the existing levels for the life of the Proposal, with additional employment provided during periods of peak demand. The quarry currently employs 24 people. In addition, the Quarry provides employment for a range of contract truck drivers, with the numbers dependent on demand for product.

In regards to life of the proposal, the applicant advised in the EIS that when taking into account the proposed average annual extraction rate of 150 000tpa and available resource of approximately 4.6 million tonnes, the life of the Proposal would be approximately 30 years.

The Quarry produces high quality material for a wide variety of uses. This benefits the surrounding local and regional community by ensuring there is adequate supply of material from a local source for construction, maintenance and upgrading of community and other infrastructure.

4.11 Cumulative impacts

The EIS stated cumulative environmental impacts from the proposal will be minimal, each identified impact has been assessed and any potential threats are shown to be mitigated.

The assessment of the development did not identify any cumulative impacts associated with the operation relating to traffic, loss of vegetation, amenity and noise. All have been addressed and will be managed effectively.

4.12 Ecological Sustainable Development

The EIS illustrated that the precautionary principle was considered during all stages of the assessment of the Proposal. Social equity relates to value concepts of justice and fairness so that the basic needs of all sectors of the community are met and that there is fair distribution of costs and benefits to the community.

5.0 PUBLIC SUBMISSIONS

Section 1 (d) any submissions made in accordance with this Act or the regulations

Nil public submissions received.

Section 1(e) the public interest

The development was advertised and publically exhibited in accordance with the provisions of the EP & A Act. No submissions were received as a result of the public notification.

It is considered to be in the overall public interest that the Application be approved.

6.0 CONCLUSION

The proposal is for continued and expanded extraction activities, and also the continued use of a concrete batching plant and landscape supplies business.

The development application is designated development and an EIS was submitted to identify all potential impacts.

The EIS has been prepared in accordance with the Director Generals requirements issued by the Department of Planning. All relevant legislation for the assessment of the development and the identified impacts are assessed within this report.

The development application was processed in accordance with the provisions of the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000*.

Based on the above assessment of the proposal, it is recommended to the Western Region JRPP that the development application for 1 Holten Drive, Broken Hill be approved subject to the conditions listed in Appendix A.

SCHEDULE A

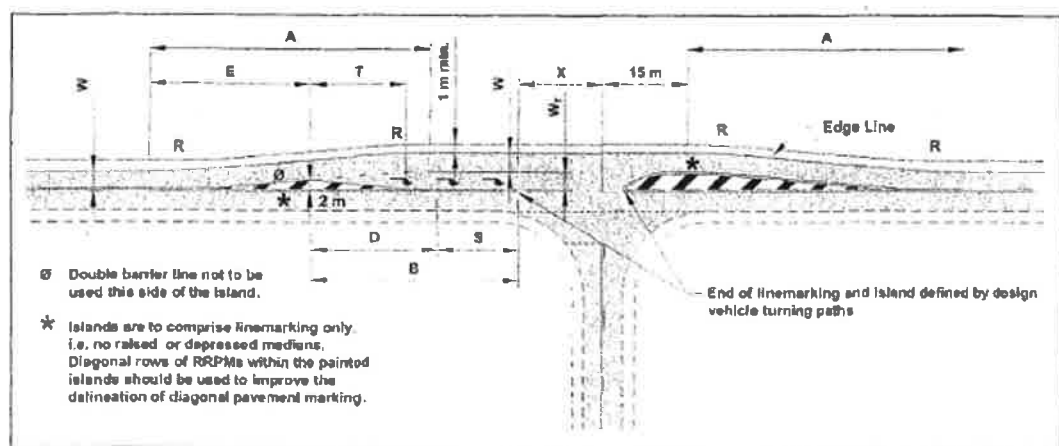
- **Office of Water condition:**

That ongoing sediment and erosion control shall be in accordance with the guideline "Managing Urban Stormwater: Soils and Construction -Mines and Quarries (2008)".

- **Roads and Maritime Services conditions:**

The existing site access to Holten Drive is to be upgraded to include a Basic Left Turn Treatment (BAL) and Channelised Right Turn Treatment Short [CHR(s)] in accordance with Figures 8.2 & 7.6 *Austrroads Guide to Road Design:Part4A* respectively (see below). Both treatments will need to be sealed and built for a 60km/h speed environment.

Guide to Road Design – Part 4A: Unsignalised and Signalised Intersections



Note: The dimensions of the treatment are defined below and values of A, D, R and T are shown in Table 7.1:

W = Nominal through lane width (m) (including widening for curves). For a new intersection on an existing road, the width is to be in accordance with the current link strategy.

W_t = Nominal width of turn lane (m), including widening for curves based on the design turning vehicle = 3.0 m minimum.

B = Total length of auxiliary lane including taper, diverge/deceleration and storage (m).

E = Distance from start of taper to 2.0 m width (m) and is given by:

$$E = 2 \left(\frac{A}{W_t} \right)$$

T = Taper length (m) and is given by:

$$T = \frac{0.33xVxW_t}{3.6}$$

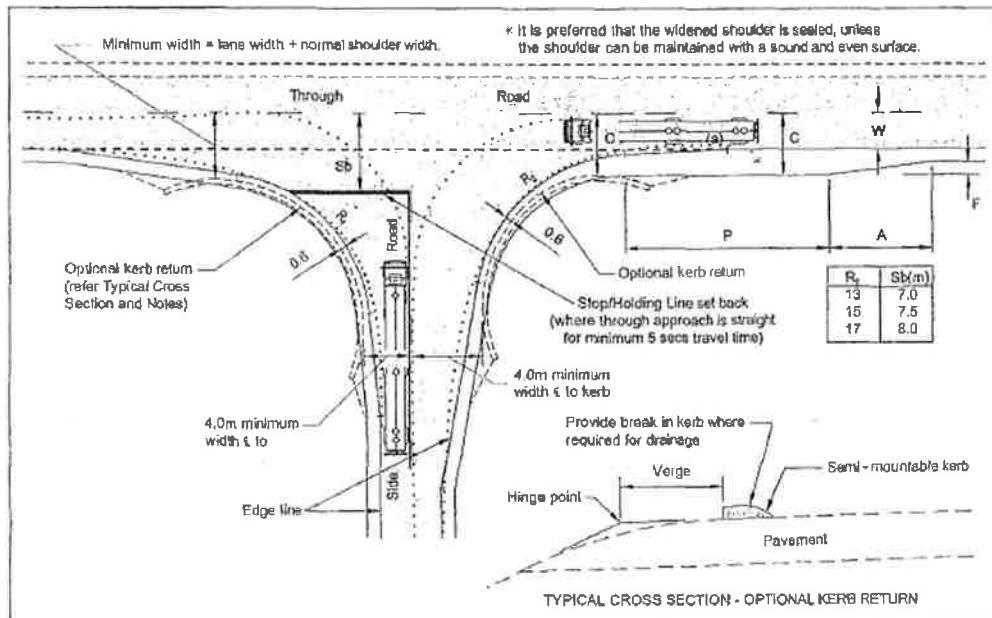
S = Storage length to cater for one design turning vehicle (m).

V = Design speed of major road approach (km/h).

X = Distance based on design vehicle turning path, typically 10–15 m.

Source: QOMR (2006).

Figure 7.6: Channelised right-turn treatment with a short turn slot [CHR(S)] two-lane rural road



Notes:

1. R₁ and R₂ are determined by the swept path of the design vehicle.
2. The dimensions of the treatment are defined thus:
 - W = Nominal through lane width (m) (including widening for curves).
 - C = On straights – 6.0 m minimum.
On curves – 6.0 m plus curve widening (based on widening for the design turning vehicle plus widening for the design through vehicle).
 - A = $\frac{0.5VF}{3.6}$
 - V = Design speed of major road approach (km/h).
 - F = Formation/carriageway widening (m).
 - P = Minimum length of parallel widened shoulder (Table 8.1).

Source: ODMR (2006).

Figure 8.2: Rural basic left-turn treatment (BAL)

- Safe Intersection Sight Distance (SISD) requirements outlined in the *Austroads Guide to Road Design Part 4A* and relevant Roads and Maritime Supplements is to be provided at the site access to Holten Drive. For a 60km/h speed zone the minimum SISD is 125 metres.
- Provide suitable storage capacity for the largest class of vehicle accessing the proposed extractive industry, any gate, grid or similar structure installed in the access is to be setback appropriately (40m for road trains) from the edge of Holten Drive.
- The proponent, in consultation with Broken Hill City Council, is to prepare and implement a code of conduct relating to transport of materials on public roads as part of the considerations under Clause 16(1) of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*.

- **Council standard conditions:**
- **Extensions/Alterations**
 That all necessary alterations and or extensions to services shall be carried out in accordance with the requirements of the appropriate Supply Authorities.
***Reason for imposition of condition:** The need to ensure that supply services are provided in accordance with the Authorities requirements.*
- **Injury to Amenity**
 That immediate remedial measures shall be taken if in the opinion of Council, injury is being caused to the amenity of the neighbourhood due to any nuisance, traffic hazard or otherwise and that the use shall cease if it is considered that the use can no longer be tolerated.
***Reason for imposition of condition:** The need to provide Council with the ability to mitigate injurious activities on the neighbourhood.*
- **Loading/Unloading**
 That all loading and unloading of goods shall be carried out wholly upon the site.
***Reason for imposition of condition:** The need to ensure that any loading and unloading, associated with the business does not cause any nuisance to surrounding properties.*
- **Signs**
 That separate application shall be made at the appropriate time for the erection of any advertising signs, including details of colour, size, height and method of illumination.
***Reason for imposition of condition:** The need to provide acceptable signage.*
- **NSW EPA General Terms of Approval**

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Attachment A

Administrative conditions

A1. Information supplied to the EPA

A1.1 Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:

- Development Application No 3/2015 submitted to Broken Hill Council about the 16 January 2015; and
- the Environmental Impact Statement titled "Broken Hill Quarry" dated December 2013 relating to the development.

A2. Fit and Proper Person

A2.1 The applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the Protection of the Environment Operations Act 1997, having regard to the matters in s.83 of that Act.

Discharges to air and water and applications to land

P1. Location of monitoring points and areas

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

Water and Land

Point	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Ambient water monitoring	-	Stormwater drain entering premises marked as "Point 1 on the map"Property & Lease Plan, Broken Hill Quarry Management Statement" amended on 9 January 2007 and kept on EPA file 235590A
2	Wet weather discharge	Wet weather discharge	Stormwater drain leaving premises marked as "Point 2 on the map"Property & Lease Plan, Broken Hill Quarry Management Statement" amended on 9 January 2007 and kept on EPA file 235590A

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3	Mass volume monitoring	-	Hard rock material extracted from the quarry
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Limit conditions

L1. Pollution of waters

L1.1 Except as may be expressly provided by a licence under the Protection of the Environment Operations Act 1997 in relation of the development, section 120 of the Protection of the Environment Operations Act 1997 must be complied with in and in connection with the carrying out of the development.

L2. limits

L2.1 The premises must not extract or crush more than 350,000 tonnes of hard rock in each annual return reporting period.

L3. Concentration Limits

L3.1 For each discharge point specified in the table below (by a point number), the concentration of a pollutant discharged at that point must not exceed the concentration limit specified for that pollutant in the table.

L3.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.

L3.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table.

Point 2

Water concentration limits

Pollutant	Units of Measure	90 Percentile Limit	100 Percentile Limit
Oil and grease	milligrams per litre	-	10
pH	pH	-	6.5 - 8.5
Total suspended solids	milligrams per litre	-	50

L4. Waste

L4.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997.

L4.2 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the Protection of the Environment Operations Act 1997.

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L4.3 The premises may receive and store up to 10,000 tonnes of building and demolition waste including bricks, concrete and tiles for the purpose of resource recovery.

L5. Hours of operation

L5.1 All construction work at the premises must only be conducted between:

7.00am to 6.00pm Monday to Friday;

8.00am to 1.00pm Saturdays; and

No construction work is to be undertaken on Sundays and Public Holidays..

L5.2 This condition does not apply to the delivery of material outside the hours of operation, if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification is provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.

L5.3 The hours of operation specified in conditions L5.1 may be varied with written consent if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected.

L6. Blasting

Overpressure

L6.1 The overpressure level from blasting operations on the premises, when measured at the nearest affected residential or other sensitive receptor, must not:

Exceed 115dB (Lin Peak) for more than 5% of the total number of blasts over a period of 12 months; and

Exceed 120dB (Lin Peak) at any time,

Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

Ground vibration (peak particle velocity)

L6.2 Ground vibration peak particle velocity from the blasting operations at the premises, when measured at the nearest affected residential or other sensitive receptor, must not:

Exceed 5mm/s for more than 5% of the total number of blasts over a period of 12 months; and

Exceed 10mm/s at any time,

Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

Time of blasting

L6.3 Blasting operations on the premises may only take place between 9.00am and 3.00pm Monday to Friday.

L6.4 The hours of operation for blasting operations specified in this condition may be varied if the EPA, having regard to the effect that the proposed variation would have on the amenity of the residents in the locality, gives written consent to the variation.

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Frequency of blasting

L6.5 The premises must not permit more than 18 production blasts in each annual return reporting period and blasting at the premises is limited to 1 blast each day on which blasting is undertaken.

L6.6 To determine compliance with condition(s) L5.1 and L5.2:

- a) Airblast overpressure and ground vibration levels must be measured and electronically recorded at for all blasts carried out in or on the premises; and
- b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.

Operating conditions

01. Odour

01.1 No condition of this approval identifies a potentially offensive odour for the purposes of Section 129 of the *Protection of the Environment Operations Act 1997*.

Note: The Protection of the Environment Operations Act 1997 states that no offensive odour may be emitted from particular premises unless potentially offensive odours are identified in the licence and the odours are emitted in accordance with conditions specifically directed at minimising the odours permitted.

02. Dust

02.1 Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.

02.2 Trucks operated by the licensee that are entering and leaving the premises and are carrying loads must be covered at all times, except during loading and unloading.

02.3 Where heavy vehicles are using internal haul roads, the haul roads being used must:

- a) have water applied to suppress dust prior to and during use; and
- b) be restricted to a maximum speed of 40 kilometres per hour.

02.4 The primary crusher and screening circuit must minimise dust emissions by having water sprays operating when crushing and cladding maintained to prevent fugitive dust emissions.

02.4 Active stockpile's must have water sprays located in situ and utilised daily to prevent windblown dust.

03. Noise

Blast management protocol

03.1 A Blasting/Vibration Management Protocol must be prepared in relation to the development and implemented.

The protocol must include, but need not be limited to, the following matters:

- compliance standards;
- mitigation measures;

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- remedial action;
- monitoring methods and program;
- measures to protect underground utilities (eg: rising mains, subsurface telecommunication and electric cables) and livestock nearby;
- notification of procedures for neighbours prior to detonation of each blast; and
- measures to ensure no damage by flyrock to people, property, livestock and powerlines.

Monitoring and recording conditions

M1 Monitoring records

M1.1 The results of any monitoring required to be conducted by the EPA's general terms of approval, or a licence under the Protection of the Environment Operations Act 1997, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in conditions M1.2 and M1.3.

M1.2 All records required to be kept by the licence must be:

in a legible form, or in a form that can readily be reduced to a legible form;

kept for at least 4 years after the monitoring or event to which they relate took place; and

produced in a legible form to any authorised officer of the EPA who asks to see them.

M1.3 The following records must be kept in respect of any samples required to be collected: 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; and

the name of the person who collected the sample.

M2. Requirement to monitor concentration of pollutants discharged

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

Point 1, 2

Water monitoring requirements

Pollutant	Units of Measure	Frequency	Sampling Method
Oil and grease	milligrams per litre	Special Frequency 1	Grab sample
pH	pH	Special Frequency 1	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample
Lead	milligrams per litre	Special Frequency 1	Grab sample
Zinc	milligrams per litre	Special Frequency 1	Grab sample

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Conductivity	milligrams per litre	Special Frequency 1	Grab sample
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M2.2 For the purpose of the table above the Special Frequency 1 means the collection of samples once, whenever there is a discharge at Point 2.

M3. Requirement to monitor volume or mass

M3.1 For each discharge point or utilisation area specified below, the applicant must monitor:

the volume of liquids discharged to water or applied to the area;

the mass of solids applied to the area;

the mass of pollutants emitted to the air,

over the interval, at the frequency and using the method and units of measure, specified below.

Hard rock extracted

Point	Units of Measure	Frequency	Sampling Method
3	Tonnes	Annually	Estimate

M4. Blast Monitoring

M4.1 For the purpose of blast monitoring, the ground vibration or the overpressure must be measured at a point representative of 423 Piper Street Broken Hill.

Note: Measurements should be taken within the grounds of 'noise sensitive sites' (e.g. residences, hospitals, schools etc). Measurement locations can be:

At the residential boundary; or

30 metres from residences in rural situations where the boundary is more than 30 metres from residences.

Airblast overpressure levels should not be measured within 3.5 metres of any building.

Ground vibration levels should not be measured with the longest dimension of the foundations of a building or structure away from such building or structure.

Reporting conditions

Annual Return

R1.1 The applicant must provide an annual return to the EPA in relation to the development as required by any licence under the Protection of the Environment Operations Act 1997 in relation to the development. In the return the applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the applicant will be required to submit load-based fee calculation worksheets with the return.

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Pollution Studies and Reduction Programs

Noise impact reduction program

U1.1 The applicant must implement the following staged noise attenuation works by the specified completion date to reduce noise impacts from the premises on surrounding residential receptors.

Stage	Works required	Date of completion
1	<p>Prepare a report that identifies noise impacts from the operation of the primary rock crusher and nominates noise attenuation measures that can be applied to the primary rock crusher to reduce off site noise impacts..</p> <p>The report must be submitted to; Head, Griffith Unit Environment Protection Authority PO Box 397 Griffith NSW 2680</p> <p>or by electronic mail to; southwest.region@epa.nsw.gov.au</p>	31 August 2015
2	<p>Enclose the concrete batching area by constructing housing around the plant. The structure must;</p> <ul style="list-style-type: none">• Be lined internally with a suitable noise absorbent material fixed to the ceiling and walls.• Any doors or access points must face north east, away from residential premises.	30 June 2016
3	<p>Implement the noise attenuation measures to the primary rock crusher that are identified in the Stage 1 report.</p>	31 August 2016.
4	<p>Undertake a Noise Impact Assessment (NIA) of all operations at the premises in accordance with the NSW Industrial Noise Policy (EPA January 2000).</p> <p>The NIA must produce a report that is submitted to the EPA by the date of completion.</p> <p>The report can use background noise levels and project specific noise criteria established in the ERM report titled 'Noise and Vibration Impact Assessment' dated 8 March 2013.</p> <p>The report must identify the noise levels generated by the premises at the nearest affected sensitive receptors and where necessary nominate mitigation actions required to further reduce noise impacts from the premises (back towards the project specific noise criteria).</p>	30 November 2016.

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Attachment B – Mandatory Conditions for all EPA licences

Administrative conditions

Other activities

This licence applies to all other activities carried on at the premises, including:

- Concrete Batching

Operating conditions

Activities must be carried out in a competent manner

Licensed activities must be carried out in a competent manner.

This includes:

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

Maintenance of plant and equipment

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

- c. must be maintained in a proper and efficient condition; and
- d. must be operated in a proper and efficient manner.

Monitoring and recording conditions

Recording of pollution complaints

The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

The record must include details of the following:

- the date and time of the complaint;
- the method by which the complaint was made;
- any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- the nature of the complaint;
- the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- if no action was taken by the licensee, the reasons why no action was taken.

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

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

Telephone complaints line

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

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

This condition does not apply until 3 months after this condition takes effect.

Reporting conditions

Annual Return documents

What documents must an Annual Return contain?

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

- a. Statement of Compliance; and
- b. Monitoring and Complaints Summary.

A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

Period covered by Annual Return

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

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

Where this licence is transferred from the licensee to a new licensee,

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

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

Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on

- a. in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
- b. in relation to the revocation of the licence – the date from which notice revoking the licence operates.

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Deadline for Annual Return

The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

Licensee must retain copy of Annual Return

The licensee must retain a copy of the annual return supplied to the EPA for a period of at least 4 years after the annual return was due to be supplied to the EPA.

Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- a. the licence holder; or
- b. by a person approved in writing by the EPA to sign on behalf of the licence holder.

A person who has been given written approval to certify a Statement of Compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review this licence.

Notification of environmental harm

Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act

Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.

The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Written report

Where an authorised officer of the EPA suspects on reasonable grounds that:

- a. where this licence applies to premises, an event has occurred at the premises; or
- b. where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

The request may require a report which includes any or all of the following information:

- a. the cause, time and duration of the event;
- b. the type, volume and concentration of every pollutant discharged as a result of the event;

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- c. the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and
- d. the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
- e. action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
- f. details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event;
- g. any other relevant matters.

The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

General conditions

Copy of licence kept at the premises or on the vehicle or mobile plant

A copy of this licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies.

The licence must be produced to any authorised officer of the EPA who asks to see it.

The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant.