

LPP 9 – Local Planning Policy – Extractive industries

1. Citation

This is a Local Planning Policy prepared under Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015* (Regulations). This Policy may be cited as Local Planning Policy No. 9 *Extractive industries*.

2. Purpose

The Shire has significant deposits of basic raw materials, including limestone, sand, granite and gravel. The proximity and volume of these materials to major developments and infrastructure projects lends to lower transport costs and reliability of supply. The supply of these materials is recognised as playing a critical role in contributing to the future growth and development of the Perth, Peel and South West regions.

A well designed, located and operated extractive industry can supply much needed resources for decades and work in harmony with the locality. The Shire strongly supports extractive industry development where it meets the four principles of sustainable development: economic, social, environmental and governance.

The purpose of this Policy is to set the tone for the sustainable development of extractive industries to ensure that they are:

- Located and designed appropriately; and
- Operated in accordance with best practice.

This Policy aims to provide transparency and clear expectations around assessment of new proposals and the review or renewal under either an extractive industry licence or development application.

The Shire will also give due regard to this Policy when considering its response to proposals under the *Mining Act 1978*.

3. Objectives

The objectives of this Policy are to:

- 1. Protect basic raw material resources in significant geological supply areas and operating extraction sites by avoiding encroachment from incompatible land uses.
- 2. Ensure that the extraction of basic raw materials avoids and mitigates any adverse impacts on the community, water resources and biodiversity values.
- 3. Protect and maintain the landscape character, productive agricultural land and the general amenity of an area with the appropriate location of operations.
- 4. Avoid and mitigate the operational impacts of extractive industry, including pollution and emissions.
- 5. Ensure that development does not have an unacceptable impact on the environmental attributes of an area and achieves nature positive outcomes during and upon completion of operations.
- 6. Achieve a high level of surface and sub-surface water protection.



- 7. Maintain or enhance efficiency and safety along transport routes.
- 8. Ensure that the proposed location and operations are compatible with the road hierarchy, or the road network can be upgraded and maintained to a minimum acceptable standard at no burden of cost to the Shire.
- 9. Protect land identified as 'Priority Agricultural Land' and ensure that agricultural uses throughout the local government area are not impacted or sterilised during operations or post mining.

4. Policy application

This Policy and Guidelines apply to all extractive industries development, including new proposals, amendments and renewals determined under either the *Planning and Development Act 2005* or the Shire's Extractive Industries Local Law.

In considering a mining proposal, determined under the *Mining Act 1978*, the Shire will give due regard to this Policy.

5. Information requirements

Information required as part of a new development application or as part of a renewal is contained within the attached Guidelines.

6. Policy provisions

Development should comply with the following measures.

6.1 General policy provisions

Development is to be consistent with and demonstrate compliance with the objectives specified in this Policy and the provisions contained within the Guidelines.

Approval period

For the purpose of the applicant's long-term planning, the Shire is prepared to consider the granting of a development approval or extractive industry licence for a period of up to five years. The approval or licence may specify conditions which need to be met prior to commencement of operations as well as conditions which are to be met on an ongoing basis.

The purpose of the five year approval or licence period is to ensure that operations are occurring in a compliant manner, management plans are functioning as intended and the operations are not negatively impacting the social, economic or environmental characteristics of the area.

Notwithstanding this requirement, an approval for a period exceeding five years may be issued where the extraction material is basalt/hard rock and subject to the conditions of operation being reviewed on a five year interval to respond to changing circumstances.

Hours of operation

Hours of operation apply to all activities including, but not limited to, the clearing, blasting, extraction, processing, stockpiling, rehabilitation and transport.

Hours of operation shall generally be limited to between 7am and 5pm Monday to Friday only. No Sundays or public holidays.

The Shire may consent to Saturday operations subject to:

Where outside the setbacks nominated for sensitive land uses – 8am and 1pm.



 Where within the setbacks nominated for sensitive land uses - The work being for rehabilitation purposes only, e.g. reshaping, topsoil spreading, watering and reseeding or planting. The use of deep ripping with heavy machinery on a Saturday will generally be prohibited due to noise concerns and Saturday rehabilitation will only be permitted provided complaints are not received from nearby land owners, in which event the approval may be removed or varied.

Staging and restoration/rehabilitation timing

The area of the pit to be open at any one time shall be no greater than two (2) hectares. Rehabilitation shall be undertaken on an incremental, staged and ongoing basis for worked areas. This shall not be left to the end of extraction operations over the property.

Prior to the commencement of the next stage of extraction, all exhausted/worked areas need to be reshaped, ripped, topsoil respread, dry seeded and a dust suppressant applied to hold the soils in place until the first rains occur.

Planting of tubestock shall occur during the next available winter.

Financial security for restoration/rehabilitation works

The Shire will only accept a financial security that accrues interest. This shall be lodged prior to the commencement or continuation of works. Securities that do not accrue interest, are not appropriate. A security must accrue interest, given that restoration/rehabilitation works may not be completed for a prolonged period of time and inflation will effectively reduce the value of the security held. The aim is to retain a financial incentive for the operator to undertake the required works.

This shall be informed by the restoration/rehabilitation plan with a detailed and itemised breakdown of costs. An additional 25 percent security shall be added to provide a financial incentive for successful works and in case the Shire is required to complete the works.

A legal agreement, generally a rehabilitation bond agreement or deed shall be entered into by both the Shire and the operator, prior to the commencement of works. This shall address the security being held and outline the conditions of release and/or use. All costs associated with the drafting, review and execution shall be borne by the operator.

A minimum of three summers shall pass following the completion of each stage of the rehabilitation works to ensure adequate survival and longevity, prior to any part of the bond or security being returned.

Annual fee

An annual fee will be applicable to all approvals, generally imposed on the Licence. This is designed to cover the costs of administration and regulatory functions of the Shire, including ensuring the compliance of operations and an annual inspection.

Annual compliance report

All approvals will be subject to a condition that requires the operator to submit an annual compliance report by 30 June of each year. This shall report on compliance with each of the conditions imposed and include a detailed pit survey, completed by a licenced surveyor.

Setbacks

Shall be setback a minimum of 50 metres from all property boundaries. This includes, but is not limited to, stockpiles, topsoil, pit and incidental structures.

Road deterioration

Extractive industries can create a concentration of heavy vehicles accessing local roads to traverse from the site. This concentration of heavy vehicles can cause damage to local roads



and result in safety and efficiency problems and a cost burden to the local government if not appropriately addressed.

Where a transport route is located along an unsealed road, the road shall be upgraded to an appropriately sealed standard. The cost of deterioration for roads shall be passed onto the extractive industry, as the source of the heavy traffic. The *Shire's Road Deterioration Preservation Funding for Extractive Industries* calculator provides a consistent and transparent process which includes industry standard formulas that can be used to calculate the value of deterioration of the pavement for a given number of truck movements.

6.2 Land use compatibility

Objectives:

- a. Proximity and management techniques ensure that off-site impacts are mitigated to protect sensitive land uses, surrounding landholder amenity and environmental characteristics.
- b. The scale and nature of operations in the context of the surrounding area is sympathetic and responsive.
- c. Management techniques clearly demonstrate how pollution and emissions and prevented.
- d. 'Priority Agricultural Land' and other agricultural land uses will not be impacted.

Refer to the Guidelines for the policy provisions.

6.3 Environment

Objectives:

- a) The proposal will result in a nature positive outcome during and upon completion of operations.
- b) Threatened Ecological Communities are not adversely impacted.
- c) Remnant native vegetation, ecological linkages and fauna foraging, nesting and roosting sites are protected and enhanced.
- d) Water dependent ecosystems are protected.
- e) The spread of dieback is prevented.
- f) Sufficient measures are in place to prevent weeds that are 'Declared' and 'Weeds of National Significance' from establishing and spreading.
- g) Acid Sulfate Soils are not triggered.

Refer to the Guidelines for the policy provisions.

6.4 Visual amenity

Objectives:

a) Protect landscapes with high aesthetic value and encourage the restoration of degraded landscapes.



- b) Protect rural landscape vistas from the introduction of industrial land uses that detract from the visual amenity, especially by means of open pits and stockpiling of material.
- c) Consider the capacity of landscapes to absorb development and the need for careful planning, siting and design in a way which is sensitive to the character of the landscape.

Refer to the Guidelines for the policy provisions.

6.5 Transport

Objectives:

- a) Safeguard school bus routes from an increased risk to safety, especially where children may be waiting for pick up or being dropped off.
- b) Existing Shire roads have the capacity and capability to handle expected vehicle types and volumes.
- c) Ensure that the projected traffic volumes and types do not prejudice road safety or capacity.
- d) Ensure that the Shire is not financially or resource burdened by increased road deterioration.

Refer to the Guidelines for the policy provisions.

7. Definitions

Restoration/Rehabilitation

Refers to the activities following extraction activities. This includes the process of repairing the damage done to make a site safe and stable and creating a landscape that can support self-sufficient future uses of the land.

Separation distances

A separation distance is the distance recommended by the Environmental Protection Authority (EPA) to separate a source of emissions from sensitive land uses. Separation distances are determined in accordance with the EPA Guidance Statement No.3 - Separation Distances between Industrial and Sensitive Land Uses and should guide the establishment of transitional land uses that ensure the protection of community health, safety and amenity.

The separation distance has been established as the shortest distance between the boundary of an impacting land use (such as industrial) and the boundary of a sensitive land use (residential, for example). Separation distances provide protection to sensitive land uses from an impacting land use but also protect the impacting land use from encroachment of incompatible land uses.

Sensitive land use

Sensitive land uses comprise land uses that are residential or institutional in nature, where people live or regularly spend extended periods of time. These include dwellings, short-stay accommodation, schools, hospitals and childcare centres and generally exclude commercial or industrial premises.

Transport impact assessment

A Transport Impact Assessment (TIA) determines the types and level of transport-related impacts on the community and amenity that may be generated from development and necessary mitigation actions. TIA guidelines support transport planning information, the level of information required and the format in which it should be presented for consideration.

Threatened Ecological Community (TEC) means:



- (a) a threatened ecological community as defined in the Biodiversity Conservation Act 2016 section 5(1); or
- (b) any other ecological community listed, designated or declared as threatened, endangered or vulnerable under or for the purposes of a written law; or
- (c) a listed threatened ecological community as defined in the Commonwealth Environment Act section 528.

Division		Planning					
Policy Number		LPP 9					
Contact Officer		Coordinator Regulatory & Development Services					
Related Legislation		Planning and Development (Local Planning Schemes) Regulations 2015					
Related Shire Documents		Local Planning Scheme No. 7					
Risk Rating	Low		Review Frequency	As required	Next Review		
Date Adopted		26/09/2023					
Amendments							
Date	Details of Amendment Reference				Reference		
Click or tap to er date.							



LPP 9 – Local Planning Policy – Extractive industries guidelines

Information requirements

The following information is required for a new pit, an expansion or for renewal. All information is to be submitted in electronic form, to a readable and legible format.

- Application for development approval form
- Certificate of Title, Deposited Plan and details of any encumbrances, easements, covenants or notifications which may affect the property.
- Payment of fees
- Site Plans detailing:
 - Current ground levels in Australian Height Datum (AHD), represented as contours to one (1) metre intervals.
 - o Proposed maximum pit depth in AHD, represented as contours to one (1) metre intervals.
 - o Proposed Finished Ground Levels (FGL), represented as contours to one (1) metre intervals.
 - o Aerial view of the property, with property boundaries overlaid with the proposed extractive industry, with an aerial photo being taken within six (6) months.
 - Pit and incidential areas.
 - Natural areas including, but not limited to:
 - Rivers, streams, creeks, wetlands, vegetated areas.
 - Any improvements to the land including, but not limited to:
 - Dwellings, outbuildings, power lines, utilities, dams, drains.
 - Locations for:
 - Refuelling.
 - Vehicle wash down.
 - Servicing.
 - Topsoil storage.
 - Extracted material stockpiles.
 - Weighbridge, waste storage, vehicle parking, crib rooms and ablutions, generator, internal roads and vehicle access points, etc.
 - Dimensions for all areas.
 - Setbacks for all areas to property boundaries.
 - Location of signage.
 - o GPS coordinates for the perimeter of all operational boundaries.

Dust and Noise Management Plan detailing:

- o Analysis of the site and project.
- o Outline specific measures to mitigate amenity and health impacts.
- Monitoring measures that will provide accurate and quantifiable data.

Water Quality Protection Management Plan detailing:

- o Details and measures to protect surface and sub surface water quality
- Known maximum groundwater levels.
- Separation and protection of wetlands.
- o Protection from Hydrocarbons with detailed designs of:
 - Refuelling areas.
 - Equipment washdown.
 - Servicing and repairs.



- Flora and Vegetation Survey for Environmental Impact Assessment, in accordance with the Environmental Protection Authority's technical guidance.
- Terrestrial Vertebrate Fauna Survey for Environmental Impact Assessment, in accordance with the Environmental Protection Authority's technical guidance.
- Acid Sulfate Soils Management Plan, in accordance with the Western Australian Planning Commission's Acid Sulfate Soils Planning Guidelines.
- Operational Management Plan detailing:
 - o Staging plan and timing.
 - Days and hours of operation.
 - Waste collection and disposal.
 - Extraction and stock pile areas.
 - Material to be extracted and quantity.
 - o Access, thoroughfares and working areas.
 - Number of persons to be employed on-site.
 - Secure water supplies to meet operational demands.
 - Any seasonal variations and likely demand/operational peaks.
 - o Number and type of vehicles, plant and equipment to be used.
 - o The nature and estimated duration of the proposed excavation.
 - o Refuelling, wash down and servicing details and areas and methods.
 - o Methods of excavation, treatment and processing and their locations.
 - o Measures to be taken to prevent erosion, water body siltation and dangers to the public.
 - Incidental development e.g. generator, weighbridge, crib hut, offices, workforce accommodation, other structures and improvements.
- Dieback Management Plan.
- Rehabilitation/Restoration Management Plan.
- Visual Landscape Assessment and Management Plan.
- Traffic Impact Assessment and Management Plan.
- Any other information that may be considered necessary.

Policy provisions

6.2 Land use compatibility

Setbacks for sensitive land uses

Information shall be provided in accordance with, and due regard given to:

- Guidance for the Assessment of Environmental Factors Separation Distances between Industrial and Sensitive Land Uses No. 3 (EPA).
- State Planning Policy 4.1 Industrial Interface (WAPC).

A 500 metre setback is required to a sensitive land use where hard rock extraction is not proposed (e.g. sand, lime). For hard rock (e.g. limestone, gravel, granite) one kilometre. Where approval is issued for operations within the setback prescribed, additional conditions to mitigate amenity or health impacts from off-site emissions may be imposed.

Public consultation



Properties that are located within the prescribed setbacks shall be notified. This shall be advertised as follows:

- Letter/email to each property; and
- Newspaper that circulates in the area.

Submissions may be made within 28 days of advertising.

Demarcating the area

The proponent shall peg the proposed perimeter of the pit and operations area, prior to making an application. This is for the purposes of identification on-site during the assessment process and during operations, if approval is granted.

Dust and Noise Management

Information shall be provided in accordance with, and due regard given to:

- A guideline for managing the impacts of dust and associated contaminants from land development sites, contaminated sites remediation and other related activities (DWER).
- Draft Guide to management of noise from waste collection and other works (DWER).



A comprehensive Dust and Noise Management Plan with quantifiable and measurable limits is critical in ensuring the amenity of the area is maintained.

A **Dust and Noise Management Plan** shall be submitted to analyse the site and project and outline specific measures to mitigate amenity and health impacts. This shall take into account seasonal fluctuations and distances to sensitive land uses and matters outlined below.

- Timing of earthworks (daily and seasonally) to coincide with periods of low wind velocity. Extraction
 activities are to avoid forecast periods/cease when wind gusts are predicted to or exceed 46
 kilometres per hour, unless management techniques prevent dust and sand being blown within or off
 the site.
- Achievable and verifiable targets for maximum atmospheric concentrations of dust particulate associated with the operations.
- Achievable and verifiable targets for maximum noise levels associated with the operations.
- Wind fencing, where necessary, to be up to three metres high of a suitable textile weave material.
- Measures to minimise 'fetch distance' of dust or other airborne particles downwind of the pit.
- Availability of an on-site water cart and sprinklers for watering internal roads and stockpile areas.
- Measures to increase soil moisture in sensitive and highly trafficked areas including water cart, sprinklers and application methods and regularity of hydro mulching and/or alternative top soil binding agents for the effective stabilisation immediately following earthworks.
- The need for noise bunding, vehicle modifications, and/or an operator/driver code of conduct.
- Dust management plan to include contingencies for when maximum levels are exceeded. Total Suspended Particles should be referenced to Particulate Matter 2.5 and Particulate Matter 10.
- Cumulative impacts of other dust and noise emitting land uses already in the vicinity.



- Limit to the orientation and area of the pit exposed to prevailing winds. The working face and stockpiles to be accessed from the leeward side, based on predicted wind direction.
- Clear lines of communication between the landowner/extraction operator and the Shire in the event of non-compliant operations.
- · Reporting procedures for surrounding properties.
- The maximum height of overburden mounds and stockpiles are to be no higher than three metres, unless appropriately stabilised with a soil binding agent. The maximum height of topsoil mounds and stockpiles are to be no higher than two metres.
- The need for a professionally monitored dust and noise measuring devices to be stationed at the extractive operation and reported dust excess values to be forwarded to the Shire as part of the annual reporting. A dust monitoring record for the period (pre development) may be required to be undertaken by a qualified professional person and supplied to the Shire, expressed as Total Suspended Particulates (TSP) from within the extraction site.
- The proximity of the proposal to sensitive land uses and measures to mitigate any potential conflict associated with dust and noise drift.
- Dust and noise suppression measures for loading operations e.g. wetting down, use of water curtains and/or water sprays during loading procedures, noise deflection walls.
- Tarpaulin measures to all loads prior to haulage leaving the site. Water is regarded as ineffective in managing dust once loaded into a vehicle.
- The impact of haulage traffic noise on the amenity of surrounding areas including sensitive land uses.
- "neighbourly noise" agreements and codes of conduct, seeking to mitigate noise impacts from haulage and extraction processes.
- Other relevant mitigation measures.

A detailed Dust and Noise Management Plan(s) should be adequate for approval at time of determination. The Shire may consider a variation to this but must be approved prior to the commencement of site works.

Priority Agricultural Land

This land is identified within the WAPC's Peel Region Scheme Priority Agricultural and Rural Land Use Policy. Due regard shall be given to this, with the only exception being development and land use permissibility. Extractive Industries are a Prohibited Use in this area to protect the high value soils and agricultural productivity of the area.

6.3 Environment

Water quality protection

The majority of the Shire and basic raw material resource is located within groundwater sensitive catchments (e.g. Peel Harvey Estuary and wetlands of international importance – Yalgorup National Park). Water quality protection is of high importance, given rare and endangered flora, fauna and invertebrate that are largely dependent on these systems. The provisions outlined below are aimed at affording the highest level of protection to these environments.

Information shall be provided in accordance with, and due regard given to:

- Water quality protection note no. 15 Basic raw materials extraction (DWER).
- Water quality protection note no. 28 Mechanical servicing and workshops (DWER).
- Water quality protection note no. 68 Mechanical equipment wash down (DWER).
- Guideline for the Determination of Wetland Buffer Requirements (WAPC).
- State Planning Policy 2.1 Peel-Harvey coastal plain catchment (WAPC).
- State Planning Policy 2.9 Water resources (WAPC).
- Draft State Planning Policy 2.9 Planning for Water and Planning for Water Guidelines (WAPC).

Separation to groundwater



A minimum of three (3) metres shall be achieved between the highest known groundwater level and the maximum pit depth. Monitoring results for at least three winters shall be provided to demonstrate the highest known groundwater level. These levels shall be outlined in AHD on relevant plans.

Separation to wetlands

Setbacks for 'wetlands' shall be as follows:

- 50 metres for multiple use and man-made wetlands.
- 100 metres for resource enhancement wetlands and unclassified wetlands.
- 200 metres for conservation category wetlands.

'Wetlands' include: swamps, marshes, lakes, lagoons, saltmarshes, wetlands, water bodies, creeks, streams, rivers, drains, dams and valleys, whether they contain water all year or just at certain times of the year.

When considering an application and setbacks, regard shall be given to:

- Proposed development and operations, including the scale and nature;
- Slope of the topography relevant to the proposal and the wetland;
- Proposed buffers and management techniques;
- The importance or value placed on the wetland;
- Whether there is existing vegetation;
- Catchment area and features; and
- Technical advice.



The Shire contains internationally significant wetlands which host endangered plants, animals, reptiles and mammals. These wetlands are replenished by surface and sub-surface water and protection of their catchments is paramount.



Protection from Hydrocarbons

Refuelling areas

Refuelling, even if undertaken via a mobile refuelling system or self-bunded system, has the potential for spills from overfilling or leakage from poorly maintained equipment. Over a prolonged period of time, cumulative spills can make their way into the groundwater.

A refuelling area or areas shall be nominated and refuelling and storage of fuels shall only occur in these areas. A detailed design shall be submitted and include the following:

- Sealed impermeable floor;
- Oil/water separator;
- For non-self-bunded tanks, a perimeter bund, designed to hold 110% of tank contents;
- For fixed refuelling stations, where mine life expectancy exceeds ten (10) years, a roofed structure over pump handles and other perishables.

Equipment washdown

To be nominated. Washdown shall only occur in these areas. A detailed design shall be submitted and include the following:

- Sealed impermeable floor;
- Oil/water separator;
- Settlement sediment basin; and
- Wastewater to discharge to a surface soak pit or evaporation basin.

Servicing and repairs

To be nominated. Servicing and repairs shall only occur in these areas. A detailed design shall be submitted and include the following:

- Located within a workshop or roofed space, where a suitable building exists;
- Sealed impermeable floor;
- · Oil/water separator (where unroofed); and
- Liquid waste storage area (secured and roofed).

Threatened Ecological Communities and vegetation

Where a proposal will disturb flora or fauna, information shall be provided in accordance with, and due regard given to:

- Flora and Vegetation Survey for Environmental Impact Assessment, in accordance with the Environmental Protection Authority's technical guidance.
- **Terrestrial Vertebrate Fauna Survey** for Environmental Impact Assessment, in accordance with the Environmental Protection Authority's technical guidance.
- State Planning Policy 2.0 Environment and natural resources policy (WAPC).
- State Planning Policy 2.5 Rural planning (WAPC).
- Environmental Guidance for Planning and Development Guidance Statement No. 33 (EPA).
- LPP 17 Vegetation (SoW).

An ecological community is a naturally occurring group of native plants, animals and other organisms that are interacting in a unique habitat. Its structure, composition and distribution are determined by environmental factors such as soil type, position in the landscape, altitude, climate and water availability. An ecological community becomes threatened when it is at risk of extinction. That is, the natural composition and function of the ecological community have been significantly depleted across its full range. This can occur for a number of reasons including clearing of native vegetation, inappropriate fire regimes, non–native or invasive species, climate change, water diversion, pollution, mining and urban development. Because of these threats, many ecological communities in Australia have undergone, and continue to be affected by a rapid and significant reduction in geographic distribution and/or ecological function.

There are at least seven (7) federally listed Threatened Ecological Communities, under the EPBC Act, located within the Shire. There are also approximately 140 Threatened and Migratory Species and a Wetland of International Importance (Peel-Yalgorup system).



Development that will adversely impact these communities, species or wetlands will not be approved or permitted to continue operations, given the precarious future of their existence.

Acid Sulfate Soils

Where a proposal may trigger Acid Sulfate Soils, an **Acid Sulfate Soils Management Plan** shall be provided in accordance with, and due regard given to:

- Acid Sulfate Soils Planning Guidelines (WAPC).
- Identification and investigation of acid sulfate soils and acidic landscapes (DWER).

This management plan shall demonstrate and ensure that acid sulfate soils are not triggered.



Acid sulfate soils can have significant impacts on the agricultural productivity of land and dieback lead to large scale vegetation deaths.

Dieback

A **Dieback Management Plan** shall be submitted in accordance with the:

- Phytophthora Dieback Management Manual and Phytophthora Dieback Risk Assessment & Management Plan Form (DBCA).
- Best Practice Guidelines for Management of Phytophthora Dieback in the Basic Raw Materials Industries (Dieback Working Group).

This management plan shall demonstrate and ensure that dieback is not triggered, introduced or spread.

Weeds

A **Weed Management Plan** shall be submitted in accordance with the:

Guidelines for weed control procedures for extractive industries licence (DAFWA)

This management plan shall demonstrate and ensure that weeds that are 'Declared' and 'Weeds of National Significance' do not germinate, grow or are spread.



The narrow-leafed cotton bush and white weeping broom are 'Declared' and 'Weeds of National Significance'. Having effective control measures in place to identify, prevent and destroy these and other weeds will stop the spread into agricultural properties.



Restoration/rehabilitation

Shall occur on an incremental, staged and ongoing basis of worked areas. The area of open pit at any one time shall be no greater than two (2) hectares. Following mining of a stage, the land shall be reinstated to the following principles:

<u>Pastured agricultural land</u> shall be returned so as to be used for agricultural purposes immediately following completion of mining with a nature positive outcome. A nature positive outcome includes, but is not limited to:

- Pastured paddocks with clusters of native trees or the perimeter planted with native trees; and
- o Drains, creeklines or other wetlands being planted with native vegetation and fenced.

<u>Bushland</u> or <u>other remnant vegetation</u> shall be fully reinstated with like-for-like replacement (species/community composition) with the Net Gains stipulated as per *Local Planning Policy 17 - Vegetation*.

A **Restoration/Rehabilitation Management Plan** shall be submitted in accordance with, and due regard given to:

- Guidelines for the Management and Rehabilitation of Basic Raw Material Pits (DBCA)
- National standards for the practice of ecological restoration in Australia Edition 2.2 (Society for Ecological Restoration).

Finished batters shall not exceed a 1:6 gradient to prevent artificial cliffs, allow for rehabilitation planting, allow for reuse of the land and prevent erosion.



Rehabilitating mine sites to viable farmland and bushland are essential to ensuring the land can be used again.

6.4 Visual amenity

The Shire has a diversity of high value landscapes and scenic areas, many of which are unique to the local government. These range from modified rural farming landscapes, natural coastal landscapes, the Darling Scarp and forested areas.

There is an increasing appreciation and valuing of natural and rural landscapes by the community. These landscapes provide opportunities for recreation and tourism and fulfil a psychological need in providing a contrast to the urban environments in which the majority of the population live.

It is recognised that landscapes change in response to demands for primary products, recreation and tourism as well as for rural living. Furthermore, the values of the community with regard to landscapes also change over time. Accordingly, as the State grows, it will be increasingly important to ensure that those landscapes that are valued by the community are protected.

Development shall demonstrate that it will not prejudice the landscape qualities of the area with the introduction of open pits, stockpiles and incidental development and uses.



Where it is likely that a proposal will be visible from a public place or neighbouring property, a **Visual Landscape Assessment and Management Plan** shall be provided in accordance with, and due regard given to:

- Visual Landscape Planning in Western Australia a manual for evaluation, assessment, siting and design (WAPC).
- State Planning Policy 2 Environment and Natural Resources Policy (WAPC).

The management plan shall demonstrate and ensure that a proposal will not be visible from a public road, reserve or property that is not associated with the industry.

6.5 Transport

All applications for extractive industries will be accompanied by a **Traffic Impact Assessment and Management Plan** as outlined in the Western Australian Planning Commission's *Transport Impact Assessment Guidelines*.

A determination of the impact of the proposal on the current road infrastructure and need for a road maintenance and/or upgrading condition, will be made in conjunction with a decision being made on the merit of development approval.

School bus routes

Where haulage operations are proposed on roads that are school bus routes, operating times shall not be during, nor within 15 minutes of scheduled school bus times. The applicant shall have determined any affected roads, the accurate school bus times and measures to be taken.

Service impacts on intersections

The Shire will consider the likely level of service impacts on intersections. Intersection upgrading requirements (including line marking, stop or give way signs, deceleration lanes, widening and/or channelisation) resulting from the transportation of material will be considered and if necessary, conditioned appropriately.

Internal roads

Internal haul roads shall be constructed, drained and maintained (including the need for bitumen seal where applicable), to ensure dust is suitably suppressed and spoils are not deposited onto the adjoining roads by haulage traffic.

Transport across adjoining local government roads

Where it is intended to utilise local road networks which cross over the Shire boundary into another local government, the application shall be referred to the neighbouring local government for comment.

Crossovers

Crossovers shall be sealed, constructed and maintained in accordance with the Shire's standard specifications. The seal length into the property shall extend for a minimum of 100 metres to prevent material entering the road. Two-way access, acceleration or deceleration lanes or widening may also be required for road transport efficiency or safety.





The intensification of heavy vehicles on roads need to be considered against road safety, efficiency, deterioration and ongoing costs to the Shire.

Road capability, capacity & deterioration

Applicants shall nominate the following relevant parameters:

- a) Total Volume of Material to be extracted from the pit (in bank cubic metres (BCM), which represents the size of the pit excavation that can be validated by a survey of the pit);
- b) Duration of the pit operation and the license approval (generally a maximum of five (5) years);
- c) Point/s of access onto the local road network;
- d) Proposed Trucking Route or Routes to connect to RAV Permit Network roads; and
- e) The peak and seasonal daily truck trips to occur along each selected route/s.

Traffic Impact Assessment Procedure

The assessment procedure is provided in the following steps. The assessment requires sequential completion of the following steps:

Step 1: Route Identification

Step 2: Number of Truck Trips Generated by the Extractive Industry.

Step 3: Point of access onto the local road network

Step 4: Rural Road Widths

Step 5: Other matters to be addressed.

Step 1: Route Identification

Applicants shall identify the trucking route or routes proposed to be used along local roads to connect the extractive industry site to MRWA Permit Network 2 roads.

Step 1: Route Identification

Applicants should develop and submit a plan that clearly identifies the:

- Extractive industry (pit) location;
- Proposed point or points of access from the pit onto the public road (crossover location);
- Selected routes: and
- Peak Daily and seasonal Truck Trips proposed on each route (refer to Step 3)
- Current traffic counts and an estimate of the existing and proposed development in the area and/or cumulative background through-traffic to be considered. Through-road traffic predictions may be based on existing counts if available and current. These can be projected forward at appropriate growth rates (generally assumed to be 5% per annum). If traffic counts have to be undertaken, full details of the count (such as location, time of day, date, type of count, percentage heavy or commercial vehicles) are to be included.

Step 2: Number of Truck Trips Generated by the Extractive Industry

This step requires an estimate of the number of trips for the routes identified in Step 1 for each year which the operations will be conducted. To assist in the calculation of this value a guideline example for calculating and validating the number of peak daily truck trips generated by an extractive industry along each route selected, is provided as follows:



Note that a single truck load of material generates two truck trips, an exit trip and a return trip to the pit. The Shire will not accept responsibility for the physical construction of road works required as a condition of development approval; e.g. through a contribution to works payment, unless the proposal can be accommodated within a current works budget.

Example Application:

- Pit volume = 300,000 cubic metres (sand pit);
- Pit License Period = 5 years
- Route Selection: Two routes are nominated consisting:
 - o Route A from the pit (100% of all truck trips), that divides into,
 - o Route B A western route (anticipate 20% of all deliveries) and
 - Route C An eastern route (anticipate 80% of all deliveries)
- The applicant advises that the extractive industry will generate no more than 200 truck trips per day (on any one day) on each of three routes A, B & C.

Note - The maximum number of truck trips (on each route) is a significant variable that needs to be accurately determined from actual expected movements. This is to be nominated by the applicant and should represent a number that is verifiable from the Shire's assessment perspective.

Example Calculation Number of Truck Trips Generated:

BCM - means bank cubic metres which is a cubic metre of compacted raw material.

LCM - means loose cubic metres which is a cubic metre of loose earth that has been loaded from an excavator.

- Average annual extraction rate:
 - = 300,000 BCM / 5 years
 - = 60,000 BCM per year
- Average daily extraction rate (annual operation):
 - = 60,000 BCM / 52 weeks / 5 working days per week
 - = 231 BCM per day

Non-working public holidays can be ignored for simplicity in this calculation. However, if the pit operation is seasonal, the calculation should aim to determine the average daily extraction rate in the main working season. For example if 90% of the annual pit volume is expected to be extracted in a six month dry season working window then the calculation is:

- Average daily extraction rate (main season):
 - = 60,000BCM x 90% / 26 weeks / 5 working days per week
 - = 415 BCM per day

Further adjustment for bulking of material is required to convert from "bank cubic metres (BCM)" in the pit to "loose cubic metres (LCM)" in the truck. Assume a 15% bulking factor unless a different factor can be justified):

- Average daily extraction rate (main season):
 - $= 415 \times 1.15$
 - = 478 LCM per day

The LCM volume can be converted to "number of truck loads" using the assumed load capacities from the table below:



TABLE 1 CONVERSION OF LCM TO TRUCKLOADS

Truck Type	19.0m Semi-Tipper	12.5m Rigid Truck
GVM	42.5t	
Tare (typical)	16t	
Net Payload (typical max)	26.5t	14.5t
Gravel Payload capacity (assuming loose gravel density of 1.8t per LCM)	26.5/ 1.8 = 14.7LCM	14.5/ 1.8 = 8.1LCM
Limestone Payload capacity (assuming loose limestone density of 1.5t per LCM)	26.5/ 1.5 = 17.7LCM	14.5/ 1.5 = 9.7LCM
Sand Payload capacity (assuming loose sand density of 1.4t per LCM)	26.5/ 1.4 = 18.9LCM	14.5/ 1.4 = 10.4LCM

This example proposes (mostly) rigid trucks to haul sand, therefore:

- Average daily truck loads (main season):
 - = 478LCM / 10.4LCM per truck
 - = 46 truck loads per average working day.

The demand on the sand resource will be variable from day to day in the peak season. It is reasonable to assume that peak day truck loads may be twice the average estimated truck trips season to account for the daily variation in demand. Unless a more accurate estimate of peak movements can be justified a factor of two should be applied to derive the peak movements. Therefore:

- Indicative Peak Day Truck Loads (main season):
 - $= 46 \times 2$
 - = 92 truck loads.

Each truck load requires an exit and a return trip. Therefore:

- Route A Peak Day Truck Trips = 92 x 2 = 184
- Route B Peak Day Truck Trips = 92 x 2 = 184*
- Route C Peak Day Truck Trips = 92 x 2 = 184*

Based on the above calculation the applicant's proposed limit of 200 truck trips per day on each route A, B & C can be accepted as a feasible value for further assessment of road upgrade requirements. This example assumes no reduction in the Route B and Route C calculations relative to the anticipated 20% and 80% of annual materials hauled on these routes, given that the peak day haulage on each route will probably be to a major construction site using only one of route B or C on that day, in which case the peak day truck numbers on route B or C will be similar to the peak day value calculated for route A, unless reasonable justification for a lower number or limit can be justified by the applicant. In this example the applicant might nominate and justify a reduced figure of 100 peak day truck trips on route B to avoid a road upgrade obligation on that route.

Step 3: Point of Access onto the Local Road Network

Applicants shall identify the trucking access/egress alignments proposed to be used from the local roads to connect to the extractive industry property.

Applicants should develop and submit a plan that clearly identifies the:

- Extractive industry (pit) location;
- Proposed point or points of access from the pit onto the public road (crossover location);
- Expected swept path of the largest vehicle expected to use the crossover; and
- Sight distance from the crossover(s) along the carriageway.



Step 4: Rural Road Widths/Road Condition Assessment

The width of rural roads outside of townsites and their corresponding capacity to support extractive industries (with or without upgrade) shall be assessed using the following table:

Table 2 - Passenger Car Equivalents for Trucks on Multi Lane Roads

Type of Terrain	Passenger Car Equivalents (PCE) factor		
Level	1.7		
Rolling	4.0		
Mountainous	8.0		

Source - "Austroads GTEP 2", Table 4.3

Table 3 - Seal Widths and Carriageway widths for Rural Roads

Design Traffic Volumes (AADT) (veh/day) (Note 1)	Carriageway Width (seal width + trafficable shoulders) (m)	Sealed Width (m) Unsealed (see note 1)	
0 - 75	7		
75 - 150	7.5	3.5 (note 2)	
150 - 500	8.0	6.0(note 3)	
Over 500	8.0 (note 4)	7.0	

Source - Based generally on "Rural Roads Guide", Table 4.1 & 4.2

Notes:

- 1. The Design Traffic Volumes include the existing traffic before the extraction plus anticipated movements from the extraction pit plus annualised traffic growth. AADT based upon seasonal variations may be considered but the value must also factor annualised traffic growth of 5.0%/year on rural roads across the life of the pit. The figure will also factor approved but not commenced extractive industry utilising the same routes in the area to avoid competition for routes.
- 2. A 3.5m seal width may be deemed acceptable where the seal already exists, to accommodate up to 150v.p.d. as indicated and subject to compliance with other specific criteria. However, where extractive industry proposals on existing unsealed roads warrant sealing due to volumes exceeding 75v.p.d. as above, then the minimum upgrade shall be a seal of 6.2m. Refer also to note 3.
- 3. A 6.0m seal width may be deemed acceptable where the seal already exists, to accommodate up to 500v.p.d. as indicated. However, where extractive industry proposals in the AADT range of up to 500v.p.d warrant sealing or seal widening of existing unsealed roads or underwidth roads as above, then the minimum upgrade shall be a seal width of 6.2m. Whilst the Rural Roads Guide suggests two lanes of 3.0m to yield a 6.0m wide seal, the Shire's current standard for this type of road is 2 x 3.1m lanes to yield a 6.2m seal.
- 4. Specific consideration should be given to providing additional carriageway (unsealed shoulder) width in excess of 8.0m to provided a carriageway width of 9.0 to 10.0m where AADT>1000 v.p.d. and particularly if the "speed environment" is high (in excess of 80km/h). Refer to the "Appendix B of the MRWA RAV Route Assessment Guide recommendations for RAV Category 2 vehicles for guidance. Otherwise the 8.0m width is nominated based on a general desire to minimise roadside clearing in rural areas of the Shire and in consideration of the 8.2m standard nominated in the MRWA guide applicable to RAV Category 2 vehicles operating up to 100km/h on roads up to 1,000AADT.

By assigning the expected traffic volumes defined at step 2 to the current and forecast traffic volumes along the expected routes, the future traffic volumes post approval can be determined for the routes. This should be done for each year in which the use will be operational. From this a determination can be made as to the capacity of the road system to absorb the additional traffic and still meet the standards outlined at Table 3 for carriageway and seal width for the life of the pit.

Step 5: Other matters to be addressed

Road carriageway and seal width are two components of the road system that require assessment for the increased traffic volumes however there are other design parameters that may need to be met, based on the changes precipitated by the proposed land use as follows;

 Horizontal curve widening and vertical alignments for rural roads shall be assessed and determined having regard to the applicable Austroads rural design standards.



- Bridge load capacity along the route(s) shall be assessed if necessary.
- Analysis of intersection(s), including proposed treatment and method of control. This may involve a summary of the analysis of average delay, degree of saturation (DOS), 95 % queue lengths and available capacity.
- Acceptable mitigation works and their timing to offset identified impacts and to maintain acceptable
 traffic operations and levels of safety to the planning horizon year. Intersections upgrades (general
 geometry, sight distances, seal, channelisation, delay).
- An assessment of whether provision of slip lanes is beneficial.
- Dust mitigation.
- Road verge vegetation Impacts.

Determination

Based on a Traffic Impact Assessment outlined above, the suitability of the route will be determined by the Shire. Where the Shire determines that the Design Traffic Volumes and other parameters will be exceeded due to the traffic generated by the extractive industry, the proponent will be responsible for meeting this through a road upgrading, maintenance and/or financial contribution condition on the approval/licence.



Documents given due regard in the assessment process

Extractive industries can have many moving parts and their design and operation requires careful consideration of many different factors (road safety, amenity of neighbours and environment to name a few). The publications listed in these Guidelines are not exhaustive and intended to give applicants and operators an understanding of what the Shire will refer to in assessing proposals and monitoring operations. These are collated below:

Abbreviations:

SPP State Planning Policy

WAPC Western Australian Planning Commission

DBCA Department of Biodiversity, Conservation and Attractions
DWER Department of Water and Environmental Regulation

DPIRD Department of Primary Industries and Regional Development

EPA Environmental Protection Authority

General planning provisions

- Shire of Waroona Local Planning Strategy
- Shire of Waroona Local Planning Scheme
- SPP 2.4 Planning for Basic Raw Materials, Explanatory note and Guidelines (WAPC)

Dieback

- Phytophthora Dieback Management Manual and Phytophthora Dieback Risk Assessment & Management Plan Form (DBCA)
- Management of Phytopthora Dieback in Extractive Industries (Dieback Working Group Best Practice Guidelines).

Rehabilitation/Restoration

- National standards for the practice of ecological restoration in Australia Edition 2.2 (Society for Ecological Restoration)
- Guidelines for the Management and Rehabilitation of Basic Raw Material Pits (DBCA)

Water quality

- Water quality protection note no. 15 Basic raw materials extraction (DWER)
- Water quality protection note no. 28 Mechanical servicing and workshops (DWER)
- Water quality protection note no. 68 Mechanical equipment wash down (DWER)
- Guideline for the Determination of Wetland Buffer Requirements (WAPC)
- SPP 2.1 Peel-Harvey coastal plain catchment (WAPC)
- SPP 2.9 Water resources (WAPC)
- SPP 2.9 Planning for Water and Planning for Water Guidelines (WAPC)

Acid sulfate soils

- Acid Sulfate Soils Planning Guidelines (WAPC)
- Identification and investigation of acid sulfate soils and acidic landscapes (DWER)

Weeds

Guidelines for weed control procedures for extractive industries licence (DPIRD)

Dust

 A guideline for managing the impacts of dust and associated contaminants from land development sites, contaminated sites remediation and other related activities (DWER)



Noise

- A guideline for managing the impacts of dust and associated contaminants from land development sites, contaminated sites remediation and other related activities (DWER)
- Draft Guide to management of noise from waste collection and other works (DWER).

Environment

- SPP 2.0 Environment and natural resources policy (WAPC)
- SPP 2.5 Rural planning (WAPC)
- Environmental Guidenace for Planning and Development Guidance Statement No. 33 (EPA)

Flora

- Flora and Vegetation Survey for Environmental Impact Assessment, in accordance with the Environmental Protection Authority's technical guidance (EPA)
- LPP 17 Vegetation

Fauna

• Terrestrial Vertebrate Fauna Survey for Environmental Impact Assessment, in accordance with the Environmental Protection Authority's technical guidance (EPA)

Sensitive land uses

- Assessment of Environmental Factors Separation Distances between Industrial and Sensitive Land Uses No. 3 (EPA).
- SPP 4.1 Industrial Interface (WAPC).

Standard conditions and advice notes

The below is a list of standard conditions and advice notes that the Shire may impose on an approval or renewal. Other conditions or advice notes may be imposed, subject to a case-by-case assessment.

- 1. This approval is valid for a period of 5 years only, commencing from the date of issue of this approval. After the expiry of this approval period, no development, including any works the subject of this approval shall to be undertaken, except for any rehabilitation works in accordance with Condition X.
- 2. The approved **Operational Management Plan**, prepared by XXXXXX dated XX XXXX 20XX, dated XX XXXX 20XX, shall be implemented and thereafter adhered to, to the specification and satisfaction of the Shire. This shall ensure that emissions and pollution do not occur and the amenity of the area is maintained.
- 3. The approved **Acid Sulfate Soils Management Plan**, prepared by XXXXXX dated XX XXXX 20XX, shall be implemented and thereafter adhered to, to the specification and satisfaction of the Shire. This shall ensure that Acid Sulfate Soils are not triggered and/or spread.
- 4. Hours of operation shall be limited to:

a. Monday to Friday: 7am and 5pm.b. Saturday: 8am and 1pm.c. Sundays and public holidays: Not at all.

This applies to all activities associated with the use including, but not limited to, the clearing, blasting, extraction, processing, stockpiling, transport and rehabilitation. Trucks or other vehicles are not to enter or exit the property outside of the permitted hours of operation specified above.

- 5. The maximum pit depth shall not exceed the Australian Height Datum nominated on the approved plans and excavation shall not occur within three (3) metres of the maximum groundwater level, whichever is the greater.
- 6. All traffic access and egress shall be obtained from the approved access point(s) only.



- 7. All haulage vehicles must be numbered and the company name must be clearly shown on fleet haulage vehicles to enable clear identification of trucks by motorists and residents.
- 8. Haulage operations on roads that are school bus routes, shall not occur during, or within 15 minutes of scheduled school bus times.
- 9. Development shall be setback as per the approved plans and not less than 50 metres from the property boundaries, whichever is the greater.
- 10. The approved Weed Management Plan, prepared by XXXXXX dated XX XXXX 20XX, shall be implemented and thereafter adhered to, to the specification and satisfaction of the Shire. This shall ensure that weeds that are 'Declared' and 'Weeds of National Significance' do not germinate or grow on-site.
- 11. By 30 June each year, an **Annual Compliance Report** shall be provided to the Shire which must be in the form, and contain the content, including the details of the operations for the preceding calendar year including, but not limited to:
 - a. The progress of the work;
 - b. A detailed survey of the pit, completed by a qualified surveyor, identifying the volume of material excavated:
 - c. The progress of rehabilitation work undertaken or completed;
 - d. Whether the provisions of each condition and the approved plans referred to in these conditions have been complied with:
 - e. In the event of any non-compliance, details of each non-compliance; and
 - f. The number and type of complaints received from the public and the responses made to those complaints.

Non-compliance with any conditions shall be rectified by the owner or operator to the specification and satisfaction of the Shire.

12. For the duration of the development, a telephone number and an email address must be maintained for which a complaint concerning the development may be made at any time. The owners and occupiers of properties within one (1) kilometre of the operations must be advised not less than once every calendar year in writing of the telephone number and the email address through which a complaint may be made.

A complaints log must be kept in which the following is to be recorded:

- a. the date and time of each complaint made and received;
- b. the means (telephone or email) by which the complaint was made;
- c. any personal details of the complainant that were provided or, if no details were provided a note to that effect;
- d. the nature of the complaint;
- e. the steps or actions taken in response to each complaint (and when those steps or actions were taken), including any follow-up contact with the complainant; and
- f. if no actions or steps were taken in relation to the complaint or enquiry, the reasons why no action or steps where taken.

A response must be made to every complaint received within three (3) working days after receipt of the complaint. The complaints log must be provided to the Shire in the Annual Compliance Report.

- 13. Operations shall be undertaken in accordance with the approved **Staging Plan**. No more than two (2) hectares of pit shall be open or in operation at any one time. No excavation work is to be commenced or carried out on the second or any subsequent stage unless:
 - a. All excavation work on the previous stage has ceased; and
 - b. Rehabilitation work on the previous stage has commenced and will be completed by the following winter.



- 14. The approved **Restoration/Rehabilitation Management Plan** prepared by XXXXXX dated XX XXXX 20XX, shall be implemented and thereafter adhered to, to the specification and satisfaction of the Shire. This shall ensure:
 - a. A staged approach to excavation, restoration/rehabilitation, in two (2) hectare increments, consistent with an approved staging plan;
 - b. Commencement of rehabilitation works on the current stage, prior to commencement of extraction on the next stage; and
 - c. Works being maintained for a minimum of three (3) summers and being completed to the satisfaction of the Shire, prior to the release of any financial security.

Prior to the commencement of works or operations:

- 15. The perimeter of the approved pit and operations area shall be demarcated by a licenced surveyor and thereafter maintained to the specification and satisfaction of the Shire.
- 16. The internal access road(s) shall be sealed for a length of 100 metres into the site, from the crossover, to the specification of the Shire and maintained thereafter to the satisfaction of the Shire.
- 17. The approved **Traffic Impact Assessment and Management Plan,** prepared by XXXXXX dated XX XXXX 20XX, shall be implemented and thereafter adhered to, to the specification and satisfaction of the Shire. This shall ensure that road safety and efficiency is not adversely impacted.
- 18. A Deed or Legal Agreement shall be entered into between the operator and the Shire, to the specification of the Shire. This shall address financial contributions to be made to the Shire for road maintenance. By 30 June each year, a financial contribution shall be made, based on a detailed survey of the pit, based on the volume of material extracted. This shall quantify the Loose Cubic Metres of material extracted and the number of truck movements to and from the site.
- 19. The approved **Noise Management Plan**, prepared by XXXXXX dated XX XXXX 20XX, shall be implemented and thereafter adhered to, to the specification and satisfaction of the Shire. Operations shall ensure that specified maximum noise levels at the property boundary and at sensitive receptors are not exceeded.
- 20. The approved **Dust Management Plan**, prepared by XXXXXX dated XX XXXX 20XX, shall be implemented and thereafter adhered to, to the specification and satisfaction of the Shire. This shall ensure that visible dust does not cross the property boundaries.
- 21. A perimeter fence shall be constructed and thereafter maintained, to the specification and satisfaction of the Shire. This shall be constructed from post and wire, with warning signs identifying the works area, and that unauthorised entry is prohibited.
- 22. The approved refuelling/equipment/vehicle washdown/servicing and repairs area(s) shall be constructed and thereafter maintained, to the specification and satisfaction of the Shire. This shall include:
 - a. Sealed impermeable floor;
 - b. Oil/water separator;
 - c. Perimeter bund;
 - d. Designed to hold 110% of tank contents;
 - e. A roofed structure, shading perishable materials;
 - f. Settlement sediment basin;
 - g. Wastewater to discharge to a surface soak pit or evaporation basin;
 - h. Liquid waste storage area; and
 - i. Located within a workshop or roofed space.



Refuelling/equipment/vehicle washdown/servicing and repairs shall only occur within the approved area(s). This shall ensure that hydrocarbons, other waste and emissions do not make contact with the surface or sub-surface hydrological system.

23. A financial security shall be lodged with the Shire for the successful completion of restoration/rehabilitation works, in accordance with the approved **Restoration/Rehabilitation Management Plan**. The security lodged shall accrue interest so as to maintain its value in line with inflation and retain a financial incentive.

This shall be released (either in stages or in full) upon successful completion of restoration/rehabilitation, to the satisfaction of the Shire.

- 24. A deed or other legal agreement shall be entered into by the landowner/operator and the Shire, outlining criteria for the release and/or use of the financial security held for the successful completion of restoration/rehabilitation works, in accordance with the approved Restoration/Rehabilitation Management Plan. All costs associated with the preparation and review of the deed or other legal agreement, inclusive of Shire costs, shall be borne by the landowner/operator.
- 25. The approved **Visual Landscape Assessment and Management Plan**, prepared by XXXXXX dated XX XXXX 20XX, shall be implemented and thereafter adhered to, to the specification and satisfaction of the Shire. This shall ensure that the operations are not visible from [insert road name] /reserve/private property.

Division		Planning					
Policy Number		LPP 9					
Contact Officer		Coordinator Regulatory & Development Services					
Related Legislation		Planning and Development (Local Planning Schemes) Regulations 2015					
Related Shire Documents		Local Planning Scheme No. 7					
Risk Rating	Low		Review Frequency	Triennially	Next Review		
Date Adopted		26/09	26/09/2023				
Amendments							
Date	Details of Amendment Reference				Reference		
Click or tap to er date.							