### **EXTRACTIVE INDUSTRIES APPLICATION REQUIREMENTS**

#### (B) Three (3) copies of a works and excavation program containing:

#### i) The nature and estimated duration of the proposed extraction for which the licence is applied.

The proposed gravel pit is intended to supply lateritic gravel material for approximately 3 years. The volume of material to be extracted from the area contained within this application is approx. 15,000 m<sup>3</sup>.

#### ii) The stages and the timing of the stages in which it is proposed to carry out the extraction.

#### The site is less than 2 Ha.

#### iii) Details of the methods to be employed in the proposed excavation and a description of any onsite processing works.

- Topsoil/overburden is to be push-stripped and windrowed on the boundary of the extraction site. Stripped material is approximately 100mm deep.
- The exposed laterite will be ripped and pushed into stock piles
- The stockpiled material will be crushed to specified size
- The material will be loaded onto trucks and carted to the end user

#### iv) Details of the depth and extent of the existing and proposed excavation of the site.

- There is no existing excavation or extraction
- The proposed excavation will be an average depth of 750mm
- The proposed excavation will cover an area of 1.9 Ha

# v) An estimate of the depth of and the description of the nature and quantity of the overburden to be removed.

The overburden to be stripped is approximately 100mm in depth and is predominantly sandy, friable soil with light pasture cover. The volume of overburden is approximately 1200 m<sup>3</sup>

### vi) A description of the methods by which existing vegetation is to be cleared and topsoil and overburden removed or stockpiled.

#### No vegetation is to be cleared for the implementation of this extractive industries activity

# vii) A description of the means of access to the excavation site and the types of thoroughfares to be constructed.

The access to the extraction site will be via the existing property crossover (off Hunwick Road) and through existing paddock gates/fencing – internal haul roads will be established in the process of implementing the pit.

viii) Details of the proposed number and size of trucks entering and leaving the site each day and the route or routes to be taken by those vehicles.

Trucks configuration will be as follows;

- Truck and pig trailer
- Semi-trailer

Number of trucks entering and leaving the site will be between 10 and 30 per day and will be entering the site on the route; South Coast Highway – Henning's Road – Hunwick Road. Exit haulage route will be via the same route.

#### ix) A description of any proposed buildings, treatment plant, tanks and other improvements.

No buildings, treatment plants, tanks or other improvements are to be constructed

x) Details of drainage conditions applicable to the land and methods by which the excavation site is to be kept drained.

The site will be drained via shaping of the pit floor and cut batters to ensure water is not concentrated and overland flows are maintained at predevelopment levels. The site is high on ironstone country, there is no expectation for the requirement to manage ground water.

# xi) A description of the measures to be taken to minimise dust nuisance, erosion, watercourse siltation and dangers to the general public.

#### See EMP attached to the same email

Dust – A water truck will be available to provide dust suppression on the haul roads and/or crushing process should it be required.

Erosion – Scour prevention (rock weirs) and bunding will be used to prevent erosion should the problem arise – due to the nature of the geology and topography erosion is not expected to be an issue.

Siltation – no water courses exist in a close enough proximity to be impacted by silt laden overland flows. Any water that does leave the pit will be monitored and pass through silt traps to allow particle settlement, should the need arise.

Dangers to the general public – No dangers to the general public are expected, trucks entering signs will be located on both sides of the property access to warn the public of the heavy vehicle activity.

# xii) A description of the measures to be taken to comply with the Environmental Protection Noise Regulations 1997.

All works (including material crushing and transport) will be conducted during stipulated work hours in accordance with the City of Albany Environmental Health Policies and/or any conditions indicated as part of the Extractive Industries and Mining Application Approval.

# xiii) A description of the existing site environment and a report on the anticipated effect that the proposed excavation will have on the environment in the vicinity of the land.

The existing environment is open paddock currently used for grazing – the impact the excavation will have once rehabilitation has been carried out, is likely to be an increase in pasture quality/growth due to the removal of porous material between the clay and the topsoil – allowing for better root moisture uptake. Because the proposed excavation will be so shallow, of a relatively small surface area and not in close proximity to vegetation, no measurable impact is expected.

# xiv) Details of the nature of existing vegetation, shrubs and trees and a description of measures to be taken to minimise the destruction of existing vegetation.

#### No vegetation is to be cleared

xv) A description of the measures to be taken in screening the excavation site, or otherwise minimising adverse visual impacts, from nearby thoroughfares or other areas.

The pit site will not be visible from thoroughfares – existing natural vegetation provides screening on all sides.

#### (C) Three (3) copies of a rehabilitation and decommissioning program indicating:

# The objectives of the program, having due regard to the nature of the surrounding area and proposed end-use of the excavation site.

The program is intended to provide lateritic gravel material to road works and associated end use sites in the area. It is acknowledged that rural areas require the same level of consideration in regard to visual amenity and public impact as projects in built up areas – however different the considerations may be qualitatively. All measures to reduce the impact on local community members will be considered and undertaken where ever possible. All safety measures and requirement swill be undertaken in regard to public road use and maintenance as required by the City of Albany.

The excavation site will be rehabilitated periodically when areas of the pit become available. Final rehabilitation contours will be established to allow for seamless blending into the existing lay of the land, facilitating natural, un-concentrated overland flows upon completion of rehabilitation.

# Whether restoration and reinstatement of the excavation site is to be undertaken progressively or upon completion of excavation operations.

The pit will be opened 1 hectare at a time and rehabilitation will be undertaken as areas of the pit become available (free from stockpile or the requirement for vehicle movements)

#### How each face is to be made safe and batters sloped.

The proposed excavation will be very shallow and batters will be produced as a function of the pushing process – by virtue of this, the batter slopes will be no steeper than 1:3

#### xvi) The method by which topsoil is to be replaced and revegetated.

Topsoil stockpiles will be pushed into position and levelled with a bulldozer – final trim will be carried out with a grader and result in a site that shows no noticeable visual depressions and no capacity to hold or re-direct overland flow. Topsoil will be reinstated to the same depth as the pre-development depth.

# xvii) The number and type of trees and shrubs to be planted and other landscaping features to be developed.

No trees or shrubs will have been cleared for the establishment of the pit, so rehabilitation will be finished with fertiliser and pasture seeding to the requirements of the land holder.

#### xviii) How rehabilitated areas are to be maintained.

The land holder will maintain the rehabilitated areas to their standard (likely the continued use as pasture).

#### xix) The program for the removal of buildings, plant, waste and final site clean up

No buildings or infrastructure (other than temporary and mobile plant) will be installed as part of the program.

#### (D) Evidence of Datum Peg / Surveyors Certificate (ADDRESSED IN Plan)

i) Evidence that a datum peg has been established on the land related to a point approved by the local government on the surface of a constructed public thoroughfare or such other land in the vicinity.

ii) A certificate from a licenced surveyor certifying the correctness of:

- (a) the approved excavation site plan;
- (b) the datum peg and related point referred to in D(i); and
- (c) pegs to mark external boundary of extraction area.
- iii) Copies of all land use planning approvals required under any planning legislation.
- iv) The consent in writing to the application from the owner of the excavation site.

v) Evidence that a notice of clearing has been given to the Commissioner of Soil and Land Conservation if that is required under regulation 4 of the Soil and Land Conservation Regulations 1992. No clearing – not required

vi) The licence application fee specified by the local government from time to time.





# Nigel Palmer Earthmoving Pty Ltd

# ENVIRONMENTAL MANAGEMENT PLAN

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#### **1** Description of Works

- Location of works 1430 Hunwick Road, Torbay
- Specific activities Establish and operate Gravel Pit
- Plant on site Bulldozer, Loader, Excavator, Crusher, Trucks
- Commencement date and duration of works Planned start date is 25 June 2021
- -

#### 2.1 Principal contractor details

Business name:	Nigel Palmer Earthmoving Pty Ltd	
Address:	PO Box 243 Denmark WA 6333	
Contact person:	Nigel Palmer or Tim Palmer	
Work phone:	0898481878	
Mobile phone:	0429 645212(Nigel) and 0427 481878 (Tim)	
Email:	admin@npearthmoving.com.au	
ABN:	90 613 223 608	

#### 2.2 Details of persons at workplace with Environmental responsibilities

Name	Position	WHS responsibilities
Nigel Palmer	Director	Manager
Tim Palmer	Operations Manager	Site Manager
Steve Ditchburn	Civil Project Manager	Project Management
Luke Ditchburn	Site Supervisor	Site Supervisor

#### 3 Environment Policy

Nigel Palmer Earthmoving strives to minimise environmental impact on job sites by making sure sensitive areas are dealt with carefully and appropriately.

We have extensive experience working in coastal areas on the South Coast of WA, managing dieback and weed control issues and other environmental considerations such as PASS, water quality monitoring and sensitive vegetation protection (implementation of TPZ's).

We endeavour to create minimal impact to adjoining land holders, local road users and community members by ensuring noise and dust suppression measures are implemented promptly and effectively where/when required.

Nigel Palmer Earthmoving is familiar with the Environmental Codes of Practice required by DBCA and implements prevention, corrective action and effective reporting to ensure these requirements are met. We are one of DBCA's preferred suppliers within the Frankland District and will continue to work closely with them to ensure that any environmental issues are carefully managed.

### 4 Site Specific Environmental Issues

### 4.1 Air Quality – Dust control

Objective	To manage construction activities with the potential to impact on air quality		
Actions	Requirements	Responsibility	Timing
	water carts will be used for dust suppression	Site Manager	Throughout construction works
	Provision of wind fences if required	Site Manager	Throughout construction of works if required
Performance Indicators	no complaints regarding dust from workers / neighbours / community members	Site Manager	Throughout construction works
Monitoring	air quality monitoring on site inspections	Site Manager	Throughout construction works
Reporting	reporting to site manager	All staff	Throughout construction works
Corrective Actions	Use of water carts in dusty areas. Check wind direction.	Site Manager	Throughout construction works

### 4.2 Noise

- Machinery to be used: Bulldozer, Excavator, Loader, Crusher and Trucks
- Machines will be used between 07.00-19:00 Mon-Fri, and Sat 07.00-19.00.

Objective	To appropriately manage noise during construction activities to minimise impact to workers, neighbours and community members.			
Actions	Requirements	Responsibility	Timing	
	all significant noise generating activities will be undertaken between 07.00 to 19.00 Mon-Fri, 7.00-19.00 Sat - Notice to nearby tenants.	Site Manager	Throughout construction works	
Performance Indicators	no complaints regarding noise from workers / neighbours / community members	Site Manager	Throughout construction works	
Monitoring	noise monitoring on site inspection	Site Manager	Throughout construction works	
Reporting	reporting to site manager	All staff	Throughout construction works	
Corrective Actions	Make sure machines are well serviced. Possibly adjust times of use	Site Manager	Throughout construction works	

### 4.3 Flora and Fauna, Weed Management

- Pit Management

Objective	To appropriately manage	e construction activitio	es with the potential to	
,	disturb flora and fauna. Weed management – eradicate and dispose of.			
Actions	Requirements Responsibility Timing			
	No vegetation will be	Site Manager	Throughout	
	disturbed without prior		construction works	
	approval			
	Check for signs of	Site Manager	Throughout	
	dieback and ensure it is		construction works	
	not spread Weed management- to	Site Manager	Throughout	
	ensure any weeds are	Sile Manager	Throughout construction works	
	eradicated and			
	monitored as per			
Performance	No injury / harm to local	Site Manager	Throughout	
Indicators	flora and fauna		construction works	
	Control of weeds -total	NPE	Throughout	
	eradication		construction works	
Monitoring	Visual monitoring	Site Manager	Throughout	
			construction works	
Reporting	Reporting to site	All staff	Throughout	
	manager		construction works	
Corrective	Ensure clearing is	Site Manager	Throughout	
Actions	approved (no clearing		construction works	
	required). Assess			
	areas prior to work			
	being done. Approval			
	from the City must be			
	obtained prior to any			
	clearing being			
	undertaken			
	Ensure weeds are	Site Manager	Throughout	
	managed appropriately		construction works	
	and in a timely fashion			
	(any material to be			
	imported to site must			
	be "certified weed-free"			
	or monitored for weeds			
	frequently and treated			
	accordingly if weeds			
	are discovered). <b>No</b>			
	weed sources have			
	been identified, no			
	material has been			
		<u> </u>		

designa	ted for	
transpo	rt to site	

### 4.4 Storm Water Management - Erosion

- Pit Management

Objective	Management specific to Storm Water Management		
Actions	Requirements	Responsibility	Timing
	Acid Sulfate Soil (ASS) – existing soil types and topography indicate no risk – Only essential works to be undertaken in an area	Site Manager	Throughout construction works
	of risk of ASS. Negate the impact of overland erosion flow on surrounding lands, using scour prevention measures (Pit floor grading, rock weirs, cut of drains and detention basins) (where required). No requirement is expected due to soils types, topography of pit location and pit size	Site Manager	Throughout construction works
	Stop the impact of sediment on water ways. No sediment transport is expected due to the soil types and topography – near crest of hill, low overland flow volumes, high permeability soils and elevated above ground water saturation. (existing contours indicate that if sediment was mobilised it would not be transported in the direction of water ways, sediment would be deposited throughout open paddock/grass)	Site Manager	Throughout construction works

Performance Indicators	No signs of erosion – no top soil transportation, no stripping of surface vegetation outside pit boundary or sign of sediment transportation and/or deposition in the direction of, or near	Site Manager	Throughout construction works
Monitoring	water ways. Visual Monitoring and testing	Site Manager	Throughout construction works
Reporting	Reporting to site manager	All staff	Throughout construction works
Corrective Actions	Only essential works to be undertaken for ASS.	Site Manager	Throughout construction works
	Undertake monitoring.	NPE	Throughout construction works
	Remove sediment deposits prior to migration into water ways	Site Manager/NPE	Throughout construction works
	Install silt traps/ rock weirs	Site Manager/NPE	Throughout construction works
	Correct pit floor grade	Site Manager/NPE	Throughout construction works
	Direct water into detention basins to allow silt deposition prior to discharging water back into natural overland flow path.	Site Manager/NPE	Throughout construction works

### Hazardous Materials Management

Objective	To establish, identify and maintain a management process that will safely control the selecting, handling, storing, transporting, using and disposal of hazardous material.		
Actions	Requirements	Responsibility	Timing
	Storage – segregation of dangerous materials. Correct labelling. Correct PPE Safety data sheets/alerts/guidance materials about	Site Manager/NPE	Throughout construction works

Performance Indicators	industry specific hazards/incidents. Spill kits. No safety incidents during construction.	Site Manager/NPE	Throughout construction works
Monitoring	Personnel induction includes safe work procedures and directions for cleaning up spills and safe use of chemicals. Supervision.	Site Manager/NPE	Throughout construction works
Reporting	Immediate to supervisor and appropriate authority.	All staff	Throughout construction works
Corrective Actions	Spill or leak cleaned up as soon as possible.	Site Manager	Throughout construction works

### 5

#### WORKER INDUCTION

This induction must outline:

- The expectations outlined in our Work, Health and Safety Management Plan, including all policies and procedures
- The emergency meeting point
- The site rules
- Environmental outcomes and corrective actions
- Any site specific hazards

### 6

#### **GENERAL SITE AWARENESS**

- Be aware of environmental management outcomes.
- Ensure adherence to City requirements
- Keep machines well maintained and conduct maintenance using the appropriate measures or offsite
- Reduce vandalism by securing valuable materials and equipment.

#### MANAGING MATERIALS AND WASTE

- Nominated person responsible for waste management, will oversee the waste management system to ensure no unsuitable materials are allowed to contaminate the soil, water or vegetation in or around the pit.
- Contractor to supply skip bins and spill kits which are removed and replaced as required.

#### USE OF VEHICLES AND EQUIPMENT

- Stay in designated work areas
- Do not speed on site.

#### INCIDENT RESPONSE AND REPORTING

The number to call in the event of an environmental incident/emergency is 000, Albany Police 98929300, City of Albany (08) 6820 3999

All environmental incidents must be immediately reported to the Site Manager.