Three Springs Seismic Survey

Environment Plan Summary

Southern Sky Energy Pty Ltd

66 Chapman Road, Geraldton WA 6530

Prepared by:

SLR Consulting Australia

SLR Project No.: 675.072512.00001

3 June 2025

Revision: 4.0

Revision Record

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3.0	26 February 2025	EH	MR	DP
4.0	3 June 2025	EH	MR	DP

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Acronyms and Abbreviations

AH Act	*Aboriginal Heritage Act 1972*
ACHIS	Aboriginal Cultural Heritage Inquiry System
ALARP	As Low as Reasonably Practicable
APPEA	Australian Petroleum Production and Exploration Association
ASS	Acid Sulfate Soils
AWD	Accelerated Weight Drop
BF Act	*Bush Fires Act 1954*
BoM	Bureau of Meteorology
CAMBA	China and Australia Migratory Bird Agreement
CS Act	*Contaminated Sites Act 2003*
DAA	Department of Aboriginal Affairs
DBCA	Department of Biodiversity, Conservation and Attractions
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety
DFES	Department of Fire and Emergency Services
DP	Designated Person
DPIRD	Department of Primary Industries and Regional Development
DPLH	Department of Planning, Lands and Heritage
DWER	Department of Water and Environmental Regulation
EP	Environment Plan/ Exploration Permit
EP Act	*Environment Protection Act 1986*
EPA	Environmental Protection Authority
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EPO	Environmental Performance Objective
EPS	Environmental Performance Standard
ESA	Environmentally Sensitive Area
IBRA	Interim Biogeographic Regionalisation of Australia
JAMBA	Japan and Australia Migratory Bird Agreement
MC	Measurement Criteria
MNES	Matters of National Environmental Significance
MNES	Matters of National Environmental Significance
NGER Act	*National Greenhouse and Energy Reporting Act 2007*
OSCAR	*Online System for Comprehensive Activity Reporting*
OSCP	Oil Spill Contingency Plan
PDWSA	Public Drinking Water Supply Area

PEC	Priority Ecological Community
PGER Act	*Petroleum and Geothermal Energy Resources Act 1967*
PGER(E)R	*Petroleum and Geothermal Energy Resources (Environment) Regulations 2012*
PGER(RMA)R	*Petroleum and Geothermal Energy Resources (Resource Management and Administration) Regulations 2015*
PGERR	*Petroleum and Geothermal Energy Resources Regulations 2012*
PMST	Protected Matters Search Tool
ROKAMBA	Republic of Korea and Australia Migratory Bird Agreement
SSE	Southern Sky Energy
TEC	Threatened Ecological Community
WAOL	Western Australian Organism List
WC Act	*Wildlife Conservation Act 1950*
YSRC	Yamatji Southern Regional Corporation

1.0 Introduction

1.1 Overview

Southern Sky Energy Pty Ltd (SSE) is a petroleum exploration company, primarily focused on developing petroleum interests in Western Australia. SSE is the current holder of the petroleum lease EP 498 located within the Perth Basin approximately 65 kilometres (km) east of Dongara.

SSE proposes to conduct two-dimensional (2D) Seismic Surveys within Exploration Permit EP 498 to identify petroleum reservoir rocks for potential future resource extraction activities via the mapping of the areas sub-surface geology (Figure 1). This Project involves the extraction of Seismic Survey data only and does not include any drilling or extraction activities. This Environment Plan (EP) is required under the Western Australian *Petroleum and Geothermal Energy Resources Act 1967* (PGER Act), to carry out the proposed Seismic Survey activities.

1.2 Project Summary

The proposed Seismic Surveys will occur wholly within Exploration Permit EP 498.The Project will cover approximately 109.04-line km of surveys with a total of eight survey lines occurring within the north Perth Basin (the site). The site occurs within close proximity to three townsites, Three Springs, Arrino and Carnamah. The project will not involve any disturbance to native vegetation and will be undertaken using existing cleared areas and tracks for access.

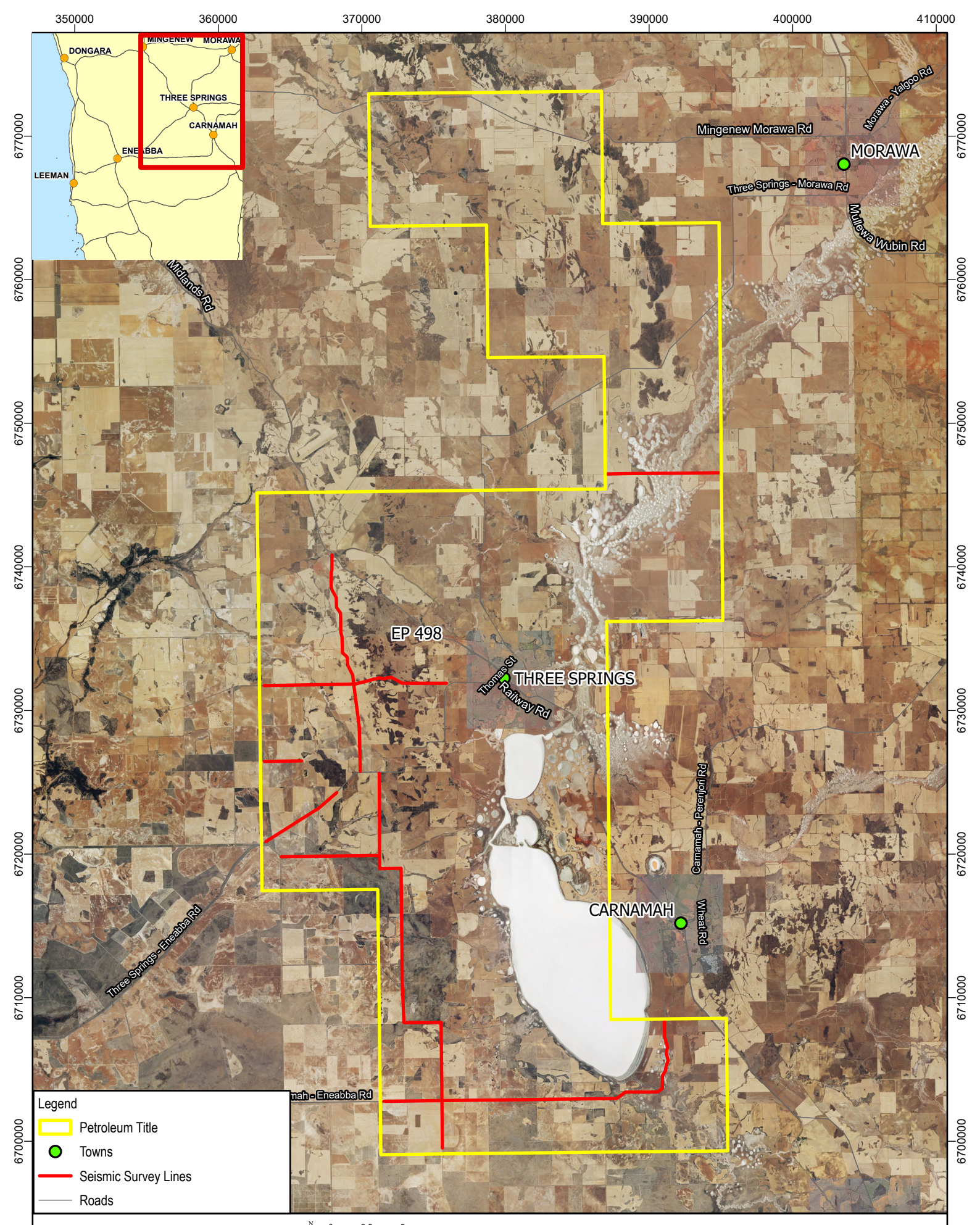
The Project is proposed to be undertaken over a total activity period of approximately 3 weeks (20 days from commencement), including mobilisation and demobilisation.

1.3 Purpose

The purpose of this EP is to provide a detailed description of the proposed activities along with a description of the management and mitigation measures implemented to ensure the activities are undertaken in such a manner as to minimise the environmental impacts to as low as reasonably practicable (ALARP).

This EP has been prepared in accordance with the DEMIRS (2022) Guideline for the Development of Petroleum, Geothermal and Pipeline Environment Plans in Western Australia, to meet the requirements of the following:

- Petroleum and Geothermal Energy Resources Act 1967 (PGER Act)
- Petroleum and Geothermal Energy Resources (Environment) Regulations 2012 (PGER(E)R)



SLR

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Coordinate System:	GDA 1994 MGA Zone 50
Scale:	1:325,000 at A4
Project Number:	675.072512.00001
Date Drawn:	25/02/2025
Drawn by:	JH
Reviewed by:	EH

Service Layer Credits: Landgate / SLIP

Southern Sky Energy Pty Ltd

Three Springs Seismic Survey

Project Location

FIGURE 1

Path: H:\Projects-SLR\675-PER\675-PER\675.072512.00001 Southern Sky Energy Environmen\06 SLR Data\01 CADGIS\GIS\Southern Sky Environment Plan\Southern Sky Environment Plan mapping\Southern Sky Environment Plan mapping.aprx

1.4 Licence Holder and Operation Details

Southern Sky Energy Pty Ltd is the registered operator of EP 498 under the PGER Act. Table 1 and Table 2 outlines the Titleholder and Operator contact details.

Table 1 Titleholder Details

Titles	Details	Titleholders	Operator	Address
EP 498	Exploration Permit	Southern Sky Energy Pty Ltd	Southern Sky Energy Pty Ltd	66 Chapman Road, Geraldton WA 6530

Table 2 Southern Sky Energy Pty Ltd Contact Details

Company Name	Southern Sky Energy Pty Ltd
Nominated Liaison Person	David Powter
Position	Sole Director/ Secretary
Business Address	66 Chapman Road, Geraldton WA 6530
Telephone Number	0499 539 131
Email Address	southernskyenergy@outlook.com

If the operator or contact details change, SSE will notify DEMIRS in accordance with PGER(E)R.

2.0 Description of Activity

To meet the requirements of Part 2 Division 3, Regulation 14(1) of the PGE(E)R, this section describes the activities associated with the Seismic Surveys.

2.1 Location of Project

The survey lines are located within EP 498, approximately 65 km east of Dongara within the Perth Basin. EP 498 covers an area of 1,492 km^2 and twenty (20) graticular blocks (one minute of latitude by one minute of longitude, called a sub-block outside of WA).

The Three Springs Seismic Survey consists of eight survey lines covering a total maximum distance of 109.04-line kms stretching from 32 km south of Three Springs to 15 km north of Three Springs. The start and end coordinates for each seismic line are provided in Table 3.

Access to the seismic survey areas will be via various established public roads and existing, well established unsealed roads and tracks, including (but not limited to):

- Carnamah-Eneabba Road
- Eneabba-Three Springs Road
- Midlands Road

All activities will be undertaken in previously cleared areas. No disturbance via clearing of native vegetation is required to perform Seismic Surveys. The work will be undertaken on freehold land and land access agreements will be obtained by all landowners prior to the commencement of activities.

The survey lines are located within the Shire of Three Springs and the Shire of Carnamah, with the nearest population centre being Carnamah, Three Springs and Arrino.

Table 3 Seismic Line Coordinates

Point	Easting	Northing
Line 1 (Start)	386978.773	6746465,612
Line 1 (End)	394965.849	6746553.900
Line 2 (Start)	367910.163	6740822.679
Line 2 (End)	369891.269	6725760.209
Line 3 (Start)	363187.817	6731732.135
Line 3 (End)	375895.528	6731894.675
Line 4 (Start)	363210.622	6726443.276
Line 4 (End)	365796.080	6726495.375
Line 5 (Start)	363307.121	6720861.278
Line 5 (End)	368243.159	6724286.197
Line 6 (Start)	364375.384	6719818.812
Line 6 (End)	371226.828	6719897.70
Line 7 (Start)	371202.774	6725623.058
Line 7 (End)	375608.861	6699527.779
Line 8 (Start)	371532.131	6702784.935
Line 8 (End)	391066.679	6708481.274

2.2 Notification

DFES will be notified of the activity prior to commencement. Given the survey is taking place on existing tracks, fence-lines, and open traversable farmlands, the Company does not envisage any real issue with regard to bushfire mitigation. SSE commits to notifying DBCA and DFES through the Geraldton Regional office and relevant local government prior to the commencement of activities.

SSE will notify the Petroleum Environment section of the DEMIRS Petroleum and Energy Compliance Branch of the start date of the activity at least five days prior to commencement of activities and will provide notification of the completion date within one week of the petroleum activity ceasing via email to petroleum.environment@dmirs.wa.gov.au.

Prior to the commencement of the activities and over the duration of the survey, SSE commits to and has begun notifying and consulting with the following parties:

- DBCA
- DEMIRS
- Local DFES brigades
- Shire Council
- Relevant landholders

2.3 Construction and Operational Details

2.3.1 Equipment and Infrastructure

Existing roads and tracks will be used to access the site.

This operation is undertaken by a small trailer mounted weight-drop unit manned by a three-person crew involving two vehicles. The type and quantity of vehicles may change depending on the availability at the time of the survey.

All equipment is owned by Rapid Geophysics Pty Ltd. It will be transported on public roads. The equipment is self-propelled and does not require a third-party transport company to ship the equipment to site.

Vehicles with adequate fuel tanks will be used to avoid the requirement for refuelling on site. The only fuel requiring storage will be a small jerry can of fuel in case of emergency, which will be stored in accordance with AS1940 (The Storage and Handling of Flammable and Combustible Liquids).

2.3.2 Mobilisation

Mobilisation to the site will occur via public roads, established access tracks and farmland (with permission from the landholder). All travel on public roads will be in accordance with the State Road legislation. In privately-owned areas, set driving speeds will be restricted (maximum of 40 km per hour). Information on mobilisation and speed limits will be included in during site inductions that all personnel are required to undertake prior to attending the site.

Daily mobilisation to and from the site will be required. This will comprise of light vehicle movement via public roads.

2.3.3 Seismic Line Preparation

No clearing of native vegetation is required to undertake Seismic Surveys, as survey lines are located within previously cleared areas and tracks. The proposed seismic lines have been selected to avoid requirements for native vegetation clearing and subsequently ensures that impacts to the environment are mitigated to ALARP. Since no native vegetation will be cleared and no pre-existing infrastructure will be removed, the proposed survey line plans may differ from the survey line route depending on any required operational changes (e.g., unanticipated access difficulties, discovery of potential Aboriginal artefacts).

Directly prior to passing the seismic vehicle through the area, a pre-survey line inspection will be undertaken. This will involve visual inspection of the seismic line whilst personnel walk the line installing the geophones. The pre-survey line inspection will aim to ensure no fauna or flora are in the path of the seismic vehicle. Records of the pre-survey line inspections will be kept using field notes to confirm no unexpected flora, fauna, heritage artefacts or sensitive receptors were traversed during seismic activities.

2.3.4 Data Acquisition

A Seismic Survey is one form of geophysical survey that aims to measure the Earth's property by means of Physical principles (geophysics). It is based on the theory of elasticity and therefore, tries to deduce elastic properties of materials by measuring their response to elastic disturbances called seismic (or elastic) waves.

As the seismic waves pass through the earth and encounter different materials, some of their energy is reflected off boundaries between the different strata whereas other waves will

pass through. The reflected energy returns to the surface, where special detectors known as geophones measure its speed and strength. The geophones convert the movement of the ground into electrical signals, which are then digitized by seismometers. These signals are then processed by computers; the more complex the geology of the area being studied, the more computing power required to process the large quantities of data.

An energy source will be provided by a trailer mounted “accelerated weight drop” unit (AWD). This unit will be towed by a four-wheel drive and positioned at each shot point. Shot points are approximately 5 m apart in a straight line and located adjacent to geophones (approximately 1.5 to 2.5 m at right angles). The shot points are adjacent to the geophones which are attached to a “takeout” on the cable at 5 metre intervals and as such no pre marking of shot points or geophones is required prior to the day of the shoot. The cables are laid out first and the AWD moves up into the spread. As recording passes on, the geophones and cable are retrieved and laid out forward of the shoot (leap frogging).

The AWD propels a 500 kg weight downward onto an aluminium plate measuring 50cm x 50cm and generates the input signal to be recorded. The plate is struck a number of times to generate a clear trace. One completion, the AWD and plate are moved 5 m to the next location. The hit point location is then raked and filled with local soil (where required). Soil is sourced from within a metre of the shot point from within the cleared road reserve or access track. In the even soils is required, the volume will be minimal as the plate size is only 50 cm x 50 cm and the road reserve or track will not be affected. The shot point location is usually “fluffed up” by a rake as the “weight drop” plate is removed. Where the ground is soft, a sealed bag filled with dry, clean sand is placed below the plate to assist in providing maximum contact. This also assists in minimising the risk of soil compaction.

2.4 Timeframes and Schedules

The Seismic Survey activities are expected to take approximately 20 days (roughly 3 weeks). Activities are expected to be split into two week long activities, with a one week break in between for system maintenance and data inspections. Activities will be undertaken within dry conditions, during seasons with low bushfire risk. Harvest and Vehicle Movement Bans will be checked during the summer months. SSE will contact the local government Bushfire Control Officer or Ranger Services.

It is expected activities will commence following the receipt of EP approval, which is expected to be roughly 90 days following EP submission. Based on this, SSE are expecting to start seismic activities in late November to early December 2024. Mobilisation, demobilisation and site preparation will be undertaken daily and is included within the 20-day timeframe and the proposed working hours.

Work will be undertaken during daylight hours only (i.e. approximately 6:00am – 6:00pm). Personnel will work 12-hour days, with 10-11 hours in the field and the remaining travelling to and from site, mobilising and demobilising equipment or holding meetings. Work will be undertaken 7 days per week.

2.5 Planning for Closure

2.5.1 Demobilisation, Rehabilitation and Closure

Following the completion of Seismic Surveys, the site will be left in a state that adheres to relevant regulations. Equipment will be removed/ demobilised, and waste despised of appropriately.

All areas disturbed by the activities will be returned to pre-disturbance conditions. Clearing of native vegetation is not required for the proposed activities and thus rehabilitation works are

not proposed. The disturbance expected to occur as a result of the project is likely to require minor civil works to restore the tracks. The closure objectives of the site are to ensure the site remains safe, stable and non-polluting post activities, similar to the surrounding environment and the site prior to disturbance.

2.5.2 Waste

The only planned waste to be generated from this project is expected to be general waste, including food waste, plastics and rubber products and wastes from minor in-field servicing and repair of vehicles.

All general wastes will be collected and retained in dedicated waste bins/containers/bags for disposal in dedicated facilities at decided waste disposal facility or at dedicated locations approved by landowners.

3.0 Description of the Environment

To meet the requirements of Part 2 Division 3, Regulation 14(2) of the PGE(E)R, this section uses available data and desktop assessments to describe the existing environment that may be affected by the Project, including the physical, biological and cultural heritage environment and conservation considerations.

The Project is located 320 km north of Perth and 65 km east of Dongara. The EP area extends to a radius of 30 km around the town site of Three Springs in the Mid-West of Western Australia. The survey lines do not cover the entirety of EP 498 and are located on existing cleared land and freehold farmland, with one identified Aboriginal Cultural Heritage site and no European Heritage sites, Threatened flora or fauna and Environmentally Sensitive Areas (ESA).

3.1 Climate

The climate of the project area is classified as a Mediterranean climate with hot, dry summers and mild, wet winters. The average maximum temperature at Carnamah ranges from 17.9 ºC in July to 36 ºC in January. The average minimum temperature at Carnamah ranges from 7.2 ºC in August to 19.3 ºC in February. The mean annual rainfall in Carnamah is 375.3 mm with the highest average rainfall occurring in June (73.2 mm) and the lowest in December (8.5 mm). The mean number of rain days for Carnamah is 75.7 days per year, with the majority falling in the months of June, July and August.

Figure 2 illustrates the mean monthly rainfall, mean maximum and mean minimum temperature at Carnamah (Station 008025), the nearest meteorological station to the well sites (BoM 2024).

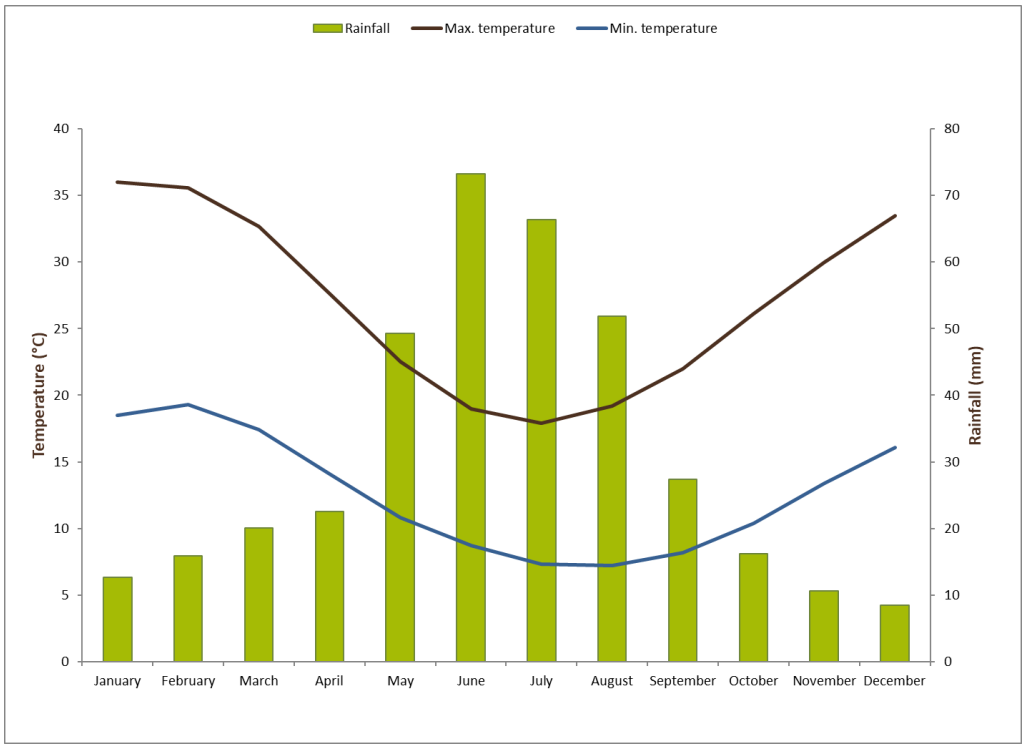


Figure 2 Mean monthly rainfall, maximum and minimum temperatures at Carnamah (Station 008025) (BoM 2024).

3.2 Interim Biogeographic Regionalisation of Australia

The Interim Biogeographic Regionalisation of Australia (IBRA) divides Australia into 89 bioregions based on major biological, geographical, and geological attributes. These bioregions are subdivided into 419 subregions as part of a refinement of the IBRA framework (DCCEEW 2023). The site occurs within the Avon Wheatbelt (AVW) and Geraldton Sandplains (GES) bioregions and the Merredin (AVW01) and Lesueur Sandplain (GES02) subregions.

The Avon Wheatbelt bioregion is an area of active drainage dissecting a Tertiary plateau in Yilgram Craton. Gently undulating landscape of low relief. Proteaceous scrub-heaths, rich in endemics, on residual lateritic uplands and derived sandplains; mixed eucalypt, *Allocasuarina huegeliana* and Jam-York Gum woodlands on Quaternary alluvials and eluvials (Beecham 2001). The Merredin subregion consists of:

- Mosaic: Shrublands; scrub-heath (South East Avon) / Shrublands; *Allocasuarina campestis* thicket.

Geradlton Sandplain bioregion is mainly proteaceous scrub-heaths, rich in endemics, on the sandy earths of an extensive, undulating, lateritic sandplain mantling Permian to Cretaceous strata. Extensive York Gum and Jam woodlands occur on outwash plains associated drainage (McKenzie, Keighery and Gibson n.d.). The Lesueur Sandplain subregion consists of:

- Coastal Aeolian and limestones, Jurassic siltstones and sandstones (often heavily lateralized) of central Perth Basin. Alluvials are associated with drainage systems. There are extensive yellow sandplains in south-eastern parts, especially where the sub-region overlaps the western edge of the Pilbara Craton. Shrub-heaths occur on a

mosaic of lateritic mesas, sandplains, coastal sands and limestones. Heath on later lateralized sandplains along the sub-regions north-eastern margins.

3.3 Soil Systems

Soil system mapping of Western Australia describes broad soil and landscape characteristics from regional to local scales, ranging from 1:29,000 to 1:250,000 (DPIRD 2018). The seismic lines are located within the soil subsystems outlined in Table 4.

Acid Sulfate Soil (ASS) mapping does not cover the extent of the seismic survey location and thus the presence or absence of ASS is unknown. Although, due to the scope of the outlined activities, it is unlikely that ASS will have a significant impact.

Table 4 Soil Subsystems within the Site

Subsystem	FID	Number	Description
Mullingarra	56600	3	Gently inclined mid and lower slopes with occasional rocky outcrops, well defined incised drainage lines; red and brown sandy duplexes and loams, some alkaline.
	57200	5	Secondary saline drainage line; saline loamy soils.
Nebru	56607	1	Low hills and rocky outcrops with short moderately inclined slopes; complex gravels on crests and sandy and loamy earths and duplexes on slopes.
	56614	2	Gently inclined slopes overlying siltstone; brown and calcareous loamy earths with loamy and sandy duplexes, gravel common in soil.
	56619	3	Prominent valleys occurring lower in the landscape and below rocky outcrop country; yellow and pale deep sand and grey deep sandy duplex.
	56623	4	Crests and upper slopes of low hills and rises; gravels, deep sand and loamy duplexes.
	56627	5	Undulating low hills and undulating to rolling low rises often with broad, plateau-like ridge crests; sands and sandy duplex.
	57037	6	Crests and upper slopes of rises; yellow and pale sands and some gravels.
	57214	7	Upland sandplain; yellow and deep pale deep sands.
Dudewa	56583	3	Level plain to gently undulating rises with occasional areas of gilgai microrelief; red to brown loamy earths and duplexes much alkaline, some clays.
	56953	4	Gently undulating rises with gravelly crests; gravelly red loamy duplexes and earths with rock outcrop, calcareous loamy earths and red-brown hardpan loams on slopes.
	57197	5	Valley floors; saline wet and salt affected loams and loamy duplexes.
Mooladara Hill	57051	5	Gently inclined hill slopes; yellow and pale deep sands and some gravels.
Coalara	56432	1	Sand filled alluvial plain, low dunes common; pale and yellow deep sands, some playa soils.
	56436	2	Long, gently inclined slopes and undulating rises with gravelly ridge crests and minor lateritic outcrops; sandy gravels and gravelly pale, pale and yellow deep sands.
Launer	56451	1	Plain with occasional low dunes and depression; yellow and pale deep sands; gravelly pale deep sand, some sandy earths and sandy gravel.

Subsystem	FID	Number	Description
	56456	2	Plain with common low dunes and depression; yellow and pale deep sands, some sandy earths and sandy duplexes.
	56464	3	Winter wet depressions; sandy soils, often wet soils.
	57034	4	Low rises with gravelly ridge crests and occasional dune remnants; yellow and pale deep sands with some sandy gravels.
Winchester	56705	2	Alluvial plain including lake shores and occasional salt lake; brown and red loamy earths and duplexes, usually alkaline, some red-brown hardpan, some saline.
	56462	3	Alluvial plain and lake margins with some salt lakes and playas; loamy duplexes and earths, much saline.
	56947	4	Lake margins with any small salt lakes; loamy duplexes and earths, much saline, much salt lakes.
	57203	5	Secondary saline areas of alluvial plain; loamy duplexes and earths, much saline.
Saline Drainage	56929	2	Narrow drainage lines to broad level salt plains in broad mature valleys' salt lakes and saline soils.
	56977	3	Terrace plains in broad mature valleys above main channel with some salt lakes; saline loams and duplexes with some salt lakes.
Poeneke	56749	1	Almost level alluvial flat with occasional areas of gilgai microrelief; calcareous loamy earths and alkaline duplexes, some saline.
	56716	2	Almost level alluvial flats and very gently inclined slopes with prominent gilgai relief; gilgai clays and loams.
Rockdale	56748	2	Gently undulating rises with broad ridge crests and shallow open depressions; red, yellow and calcareous loamy earths with yellow deep sand.
Pindar	56975	1	Gently undulating sandplain and long gentle slopes; acidic yellow and brown deep sands and sandy earths.
Dalgooka	56778	3	Loamy duplexes and earths, commonly alkaline, rock outcrop and stony soils.
	56782	4	Gently undulating low rises with occasional prominent gravelly ridges; yellow deep sand and sandy earths, some gravels and loamy duplexes.

3.4 Hydrogeology

3.4.1 Groundwater

The survey lines occur within two proclaimed groundwater areas, Gascoyne and Arrowsmith and four groundwater subareas, Tathra, Darling, Yuna/Eradu and Mullewa/Byro (DWER 2024). The Arrowsmith groundwater area contains at least nine aquifer systems, two of which (the Darling and Tathra) lie within the permit area.

The site intersects with two Public Drinking Water Source Area (PDWSA):

- Dathagnoorara Water Reserve, a P1 PDWSA
- Dookanooka Water Reserve, a P2 PDWSA

3.4.2 Surface Water

The site intersects with one major water source, Arrowsmith River which extends across the north-western portion of the site. The Arrowsmith River catchment flows predominantly east-west from the upland areas in the West Midlands Region Catchment and has a high density of drainage lines along the Dandaragan scarp.

The site intersects with five minor water sources, including Warradarge Creek, Coonderoo River, Yarramonger River, a minor river and a minor tributary.

The site is located across the YarraMonger, Moore River, Hill River and Arrowsmith River catchments.

3.5 Flora and Vegetation

A database search using NatureMap (DBCA 2018) was undertaken in July 2024, to determine whether any priority flora taxa may have potential to occur within the area.

3.5.1 Flora and Vegetation Desktop Assessment

Assessments were undertaken of the flora and vegetation values of conservation significance as listed under the EPBC Act and EP Act. Buffer areas were applied to the database searches, to ensure all records in the vicinity were captured.

One hundred and fifty-four (154) conservation significant flora were identified from the 2024 NatureMap (DBCA 2018) searches as occurring within a 10 km radius of the seismic lines. The full list of conservation significant flora species within a 10 km radius of the project is provided as Appendix B. A variety of vegetation units cover the survey area, with the most predominant units being scrub-heath, thicket, samphire with thicket and scattered trees and woodland. Twenty-two of these species are likely to occur within the seismic survey area, due to their location and habitat preference being similar to the seismic survey area (Table 5).

Table 5 Conservation Significant Flora Records within 10 km of the Seismic Lines that are Likely to be in the Survey Area

Scientific Name	Conservation Status	
	Commonwealth	State
Acacia chapmanii subsp. *chapmanii*	-	P1
Acacia flabellifolia	-	P3

Scientific Name	Conservation Status	
	Commonwealth	State
Acacia isoneura subsp. *isoneura*	-	P3
Allocasuarina grevilleoides	-	P3
Austrostipa nunaginensis	-	P3
Banksia chamaephyton	-	P4
Banksia cypholoba	-	P3
Banksia splendida subsp. macrocarpa	-	P3
Banksia trifontinalis	-	P3
Calothamnus accedens	-	P4
Daviesia bursarioides	T	CR
Grevillea amplexans subsp. adpressa	-	P1
Grevillea erinacea	-	P3
Grevillea leptopoda	-	P3
Grevillea rudis	-	P4
Hakea megalosperma	T	VU
Hibbertia subvilosa	-	P3
Melaleuca barlowii	-	P3
Persoonia rudis	-	P3
Stylidium drummonidanum	-	P3
Verticordia albida	T	CR
Verticordia densiflora var. roseostella	-	P3

3.5.2 Invasive Species and Diseases

3.5.2.1 Introduction and/or Spread of Weeds

The Western Australian Organism List (WAOL) database identified 119 Declared Pests under Section 22(2) of the Biosecurity and Agricultural Management Act 2007 within the Shire of Three Springs, with 18 of those being listed as Weeds of National Significance (WoNS). The spread of weeds will be managed through the following measures:

- The entire survey will be conducted on existing cleared road reserves, tracks, fence lines and firebreaks.
- Ensuring all vehicles are clean prior to entering the area (will be confirmed by Site Manager checking vehicles prior to mobilisation).
- Cleaning of vehicle wheels, underside and trays prior to entering properties from the road reserve.
- The exploration team will be supplied with information and photographs to assist them to identify the main weeds of concern in the area.

- If personnel are working in an area where a weed outbreak is evident, they will inspect vehicles for seed and brush seed off the vehicles with handheld brushes prior to moving into a new area.

3.5.2.2 Introduction and/or Spread of Dieback

The project area is located within the Geraldton Sandplains Bioregion. Due to the arid nature and vegetation types of this area, there is negligible risk of the introduction and/or spread of Dieback.

A review of the *Phytophthora cinnamomi* (Dieback) Distribution Map confirms the presence of this soil pathogen has not been identified this far north or inland.

In order to reduce the risk of Dieback, SSE commits to undertaking surveying operations in dry conditions and will clean vehicles upon entry into private land.

3.5.3 Threatened and Priority Ecological Communities

Ecological communities are naturally occurring biological assemblages located in a particular type of habitat. Threatened Ecological Communities (TECs) are protected under the EPBC Act and are listed as either 'Critically Endangered', 'Endangered' or 'Vulnerable'. DBCA also maintains an additional list of Priority Ecological Communities (PECs), for communities that have the potential to be classified as TECs but are not currently surveyed adequately (DBCA 2018).

A search of the EPBC Act Protected Matters Database (DCCEEW 2024) was undertaken and one TEC, Eucalypt Woodlands of the Western Australian Wheatbelt, was recorded within 20 km of the site.

3.6 Fauna

A series of NatureMap (DBCA 2018) database searches were undertaken to determine fauna of conservation significance as listed under the EPBC Act that may occur within the survey area. A buffer up to 10 km was applied to the searches.

The database searches indicated that sixteen (16) conservation significant terrestrial vertebrate fauna species have the potential to occur inside or within 10 km of the survey area (Table 6).

The list comprises of:

- Thirteen (13) bird species (five (5) of which are migratory listed)
- One (1) mammal species
- One (1) reptile species
- One (1) invertebrate species

The likelihood of occurrence within the survey area of these sixteen (16) conservation significant species were assessed through the consideration of available suitable habitat. A summary of the likelihood of occurrence for all conservation significant species can be found in (Table 6).

3.6.1 Mammals

NatureMap results identified one (1) terrestrial mammal species of conservation significance having the potential to occur within 10 km of the project area (DBCA 2018). This species is

considered to have a low likelihood of occurrence within the site area, due to the small disturbance footprint and the lack of suitable habitat.

3.6.2 Invertebrates

One (1) conservation significant invertebrate has the potential to occur within 10 km of the site, although the likelihood of occurrence is considered to be low.

3.6.3 Reptiles

One (1) conservation significant reptile has the potential to occur within 10 km of the site, although the likelihood of occurrence is considered to be low.

3.6.4 Birds

Thirteen (13) bird species of conservation significance have the potential to occur within the survey area. Of these thirteen (13) species, two (2) species had a medium likelihood of occurrence within the survey area.

3.6.5 Impacts to Potentially Occurring Significant Fauna

From the database searches, two (2) conservation significant species, both of which are bird species, are expected to have a medium likelihood of occurrence, when considering the presence of suitable habitat within the survey area. These species inhabit a range of habitats and are highly mobile, thus their habitats are not restricted to the survey area and impacts are expected to be minimal.

Table 6 Potential Impacts to Conservation Significant Species within 10 km of the Site

Species	Conservation Status		Likelihood of Occurrence	Potential Impact
	Commonwealth	State		
Birds				
Blue-billed Duck - *Oxyura australis*	-	P4	Low	No breeding habitat is likely to occur within the seismic survey area and therefore, if at all, the area is only likely to be used for foraging by these species. Given the highly mobile and even migratory nature of these species, the potential impact to these species is expected to be minimal.
Carnaby's Cockatoo – *Zanda latirostris*	EN	EN	Low	
Common Greenshank – *Tringa nebularia*	MI	MI	Low	
Curlew Sandpiper – *Calidris ferruginea*	CR & MI	MI	Low	
Forest Red-tailed Black Cockatoo – *Calyptorhynchus banksii naso*	VU	VU	Low	
Fork-tailed Swift – *Apus pacificus*	MI	MI	Medium	
Hooded Plover – *Thinornis cucullatus*	-	P4	Low	
Malleefowl – *Leipoa ocellata*	VU	VU	Low	
Peregrine Falcon – *Falco peregrinus*	-	OS	Medium	
Red-necked Stint – *Calidris ruficollis*	MI	MI	Low	
Sharp-tailed Sandpiper – *Calidris acuminata*	MI	MI	Low	

Species	Conservation Status		Likelihood of Occurrence	Potential Impact
	Commonwealth	State		
Western Ground Parrot – *Pezoporus flaviventris*	CR	CR	Low	
White-tailed Black Cockatoo – Zanda sp, 'white-tailed black cockatoo'	EN	EN	Low	
Mammal				
South-western Brush-tailed Phascogale – *Phascogale tapoatafa wambenger*	-	CD	Low	Any temporary disturbance associated with the activities is expected to have minimal impact to this species.
Reptile				
Western Spiny-tailed Skink – *Egernia stokesii badia*	EN	VU	Low	Any temporary disturbance associated with the activities is expected to have minimal impact to this species.
Invertebrate				
Woolybush Bee – *Hylaeus globuliferus*	-	P3	Low	Any temporary disturbance associated with the activities is expected to have minimal impact to this species.

Should any EPBC listed fauna species be encountered during the activities, the sighting will be reported to the Site Supervisor immediately and all movements and works within a 50 m buffer of the sighting will cease until actions to mitigate harm to the species have been implemented.

3.7 Social and Economic Environment

The tenement includes the town of Three Springs which services existing mines, agricultural businesses and traffic travelling through the area. The Three Springs townsite offers a general store, roadhouse (fuel and meals), and mechanical services. Emergency services include a volunteer ambulance service, a silver chain nursing post, State Emergency Services, and the Bush Fire Bigrade.

The area is supported by broad acre cropping and sheep farming as well as recent diversification into cattle, pigs and wildflower intensive farming. Associated businesses servicing the surrounding farming properties are located around the region's towns. The main industrial operation is a talc mine operated by Imerys Talc.

In recent time, additional employment opportunities have been available through the Karara Mine operation east of Morawa which is currently installing power lines to enable reliable power to the Karara mine site. The Karara mine has employed many local residents for transportation of iron ore via the road network to Geraldton Port whilst the railway upgrade is being undertaken. Additional infrastructure projects include the recently approved ERM gas-fired power station which will be located east of the Three Springs townsite and will provide a reliable power source for surrounding mining operations, as well as connection to Geraldton. The ERM project is anticipated to provide additional employment opportunities and other contributions to the local economy.

The main industries in which residents in the region are employed are 'Grain-Sheep or Grain-Beef Cattle Farming' (17.4%), 'Other Grain Growing' (17.4%), 'Local Government Administration' (8.3%), 'Other Non-Metallic Mineral Mining and Quarrying (5.0%) and 'Primary Education' (4.5%) (Australian Bureau of Statistics 2021).

A proposed wind farm development operated by Neoen Pty Ltd (Neoen) intersects with a proposed seismic line (Sweetman Track) along Sweetman Road. Consultation has been undertaken with Neoen regarding land access and opportunity for both activities to co-exist (refer to Table 36 for details).

3.8 Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) are declared by the Department of Water and Environmental Regulation (DWER) to prevent the degradation of important environmental values such as Threatened flora, TECs or significant wetlands.

No ESAs are mapped within the site. The nearest ESA is a TEC located approximately 2.5 km north of the nearest seismic line.

3.9 Matters of National Environmental Significance

A search of MNES was conducted using the Protected Matters Search Tool (PMST) (DCCEEW 2024). Results from the PMST search within a 20 km radius of the site are summarised in Table 7 and provided in full in Appendix B.

Table 7 Summary of MNES Within a 20 km Radius of the Site

Matters of National Environmental Significance	Findings
World Heritage Properties	None
National Heritage Places	None

Matters of National Environmental Significance	Findings
Wetlands of International Importance (Ramsar)	None
Listed Threatened Ecological Communities (TEC)	One TEC was identified within the seismic survey area, the 'Critically Endangered' Eucalypt Woodlands of the Western Australian Wheatbelt' (ID 128).
Listed Threatened Species	Sixty-eight listed threatened species, including Black Cockatoos have been recorded within a 20 km radius of the site.
Listed Migratory Species	Six migratory species have been recorded within a 20 km radius of the site.

3.10 Reserves and Conservation Areas

No Conservation Areas or Reserves are identified within the site. A variety of conservation areas are located within close proximity to the seismic lines (Table 8).

Table 8 Reserves and Conservation Areas within 5 km of the Site

Parcel Identifier	Name	Distance from Site
R 32907	Kadathinni Nature Reserve	85 m north of the nearest seismic line
R 13496	Dookanooka Nature Reserve	500 m north and 500 m east of the nearest seismic line
R 32906	West Kadathinni Nature Reserve	1.27 km east of the nearest seismic line
R 48328	Yarra Yarra Lake Conservation Park	1.36 km north of the nearest seismic line
R 31916	Unknown	3.5 km southeast of the nearest seismic line
R 26442	Yarra Yarra Lakes Nature Reserve	4.68 km southeast of the nearest seismic line

3.11 Heritage

3.11.1 Aboriginal Heritage

The DPLH Aboriginal Cultural Heritage Inquiry System (ACHIS) identified the eastern seismic lines intersect with one Aboriginal Heritage place:

- ID 24382 Yarra Yarra Lakes
  - Status: Registered Site
  - Type: Creation/ Dreaming Narrative; Landscape/ Seascape Feature (DPLH 2023).

The ACHIS has six locations recorded within 5 km of the site, these are outlined in Table 9.

Table 9 Aboriginal Heritage Sites within 5 km of the Site

ID	Name	Type	Status	Distance from site
24378	Simpson Road Artefact Scatter	Artefacts/Scatter	Lodged	2 km west of the nearest seismic line
24380	Mongers Lake Waterway	Creation/ Dreaming Narrative; Landscape/ Seascape Feature	Registered	4 km north of the nearest seismic line
5705	Yandanooka	Artefacts/ Scatter	Lodged	3.5 km north of the nearest seismic line
30068	Arrowsmith River	Creation/ Dreaming Narrative; Water Source	Registered	1.8 km west of the nearest seismic line
22432	Bimara	Landscape/ Seascape Feature	Registered	4 km north of the nearest seismic line

SSE have undertaken consultation with YSRC, as the proposed seismic activities will intersect the Yarra Yarra Lakes Aboriginal Heritage Site. However, the proposed activities will not cause any risk or harm to Aboriginal Heritage places, given no ground disturbance is proposed, and the activities will only traverse land that has been previously disturbed. Consultation with YSRC has determined that Heritage surveys are not required and an Activity Notice agreement has been determined between SSE and YSRC regarding the seismic survey.

The proposed activities will not result in any harm to the Yarra Yarra Lakes Aboriginal Heritage Site, as the activities will not traverse areas outside of previously disturbed areas and therefore will not enter any potential heritage areas. Therefore, consultation with the Department of Planning, Lands and Heritage (DPLH) is not required, as DPLH approval is only required where there is potential for any harm to an Aboriginal site. However, to ensure no approvals are required to undertake these activities, SSE have contacted DPLH for advice on the proposed activities (refer to Table 26). DPLH confirmed that no approvals are required, as the proposed activities are taking place within existing road infrastructure.

3.11.1.1 Native Title

The site is covered by the Yamatji Nation determination (WC2019/008) (7 February 2020), and the Yamatji Nation Agreement (ILUA NNTT No. WI2020/002).

3.11.2 European Heritage

There were four (4) European heritage places identified by the inherit State Heritage Office database (DPLH 2023) within three (3) kilometers of the site (Table 10).

Table 10 European heritage places within 3 km of the site

ID	Name	Distance from site
5292	Arrino Townsite	1.45 km northwest of the nearest seismic line
5293	Arrino Silos	1.76 km northwest of the nearest seismic line
5290	Parakalia	100 m east of the nearest seismic line
6172	Yarra Well Cottage	776 m north of the nearest seismic line

4.0 Environmental Risk Assessment and Management

A summary of the potential environmental impacts that may result from the project and the Objectives, Standards and Performance criteria for all risks identified are provided in Table 11. It outlines the various management and mitigation measures to be implemented to minimise the environmental risks.

Table 11 Performance Objectives, Standards and Measurement Criteria

Source of Risk	Objectives	Standards	Measurement Criteria
Vehicle movement – Fauna Interaction	No injury or death of native fauna due to vehicle strikes	• Vehicle speeds restricted to 30 km/hr on seismic lines • Limit of two survey vehicles at one time • Seismic survey restricted to daylight hours • Personnel walk the line installing geophones before the seismic vehicles pass to ensure no fauna is present • Field personnel will be inducted on speed limits, vehicle inspection requirements • Injured fauna reported to DBCA • Meet the requirements of the *Environmental Protection Act 1986* • Meet the requirements of this *Environmental Plan*	Site audits and inspection records to confirm use of low impact seismic technology Induction records demonstrate 100% of onsite personnel and contractors have completed site inductions Fauna Interaction Report records details of all fauna interactions (relocations, injuries and fatalities) and includes date, location, species, habitat, form of encounter and release details.
Vehicle movement – clearing of vegetation	No damage or loss of native flora	• No clearing is required, as the survey is restricted to existing tracks and traversable farmland • Slashing of vegetation that maintains rootstock will occur if vegetation is preventing access in designated access tracks. • Personnel will be inducted on flora management and vehicle movement • Meet the requirements of *Environmental Protection Act 1986* • Meet the requirements of the *APPEA Code of Environmental Practise 2008* • Meet the requirements this *Environmental Plan*	Site audits and inspection records to confirm use of low impact seismic technology 100% of onsite personnel and contractors have completed site inductions. Location of seismic lines within previously disturbed/ cleared areas Flora interaction register to record any interaction with flora, to ensure no flora is present prior to traversing the area
Vehicle movement – sensitive receptor disturbance	No complaints from landowners in relation to traffic impact	• Survey vehicles limited to two vehicles at one time • Use of signals, cones, signs etc, to assist in safe diversion of traffic around the seismic vehicles	100% of onsite personnel and contractors have completed site inductions.

Source of Risk	Objectives	Standards	Measurement Criteria
	associated with the proposed activities	• SSE will record all complaints filed due to traffic impacts and any actions taken in response to the complaint • Personnel will be inducted on traffic management and vehicle movement	Site audits and inspection records to confirm use of signals, cones, signs for diversion of local traffic Site and audit inspection records that verify traffic complaints have been received and managed appropriately
Vehicle movement and AWD – soil erosion and compaction	No compaction or erosion of soil due to vehicle and equipment movement	• Seismic lines located within previously disturbed and cleared areas • If light grading is necessary, flora rootstock will be left intact to promote revegetation • The DP shall ensure vehicle speeds are limited to 30km/hr during survey on seismic lines, other speeds limited to posted speed limits. • Two survey vehicles used in seismic survey activity • Following completion of activities, light raking of the impact zone will bring the surface back to the same condition as it were prior to the shot being taken • Personnel are required to undertake site inductions	Induction records demonstrate 100% of onsite personnel and contractors have completed site inductions Location of seismic lines within previously disturbed/ cleared areasFlora interaction register to record any interaction with flora, to ensure no flora is present prior to traversing the area
Fuel and hazardous chemical handling	No loss of containment of hydrocarbons during transport	• All refuelling to be undertaken offsite at commercially operated fuel stations. • Vehicle pre-start checks will be undertaken daily. • Spill kits will be available to survey team. • Spill events to be cleaned up immediately, materials used in clean up and any impacted soil to be removed from site to a licensed waste facility. • Small amounts of fuel to be stored within vehicles and are required to be stored in accordance with AS1940 (The Storage and Handling of Flammable and Combustible Liquids). • Personnel are required to undertake site inductions	Induction records demonstrate 100% of onsite personnel and contractors have completed site inductions. Induction records show that all crew are trained in the OSCP. Records of fuel usage to be recorded in daily inspections. Training records verify that operations personnel are trained and competent in spill response. Site audits and inspection records to confirm spill kits are adequate and available and to confirm there is no evidence of spills that have not been responded to.

Source of Risk	Objectives	Standards	Measurement Criteria
		• Meet the requirements of this *Environmental Plan* • Meet the requirements of the *Environmental Protection Act 1986*	Waste register records confirm was generated from spill events are disposed of correctly.
Vehicle movement dust– flora and fauna health	The risks generated from dust via vehicles travelling on unsealed roads/ tracks is considered to be low given the low number of vehicles. The amount of dust is considered to be negligible. Thus, SSE believes that the dust generated from the activities will not result in any adverse impacts on flora and fauna and thus has not considered this any further.		
Vehicle movement dust – sensitive receptor disturbance	No complaints from landowners in relation to dust emissions generated from the activity	• SSE will record all complaints made regarding dust emissions and identify any action taken in response to said complaints. • SSE will finalise land access agreements prior to entering and disturbing relevant landowner's property.	Site audits and inspection records verify any dust complaints have been received and managed appropriately via a Complaints Management System. Land access agreement register to confirm all agreements have been obtained and finalised.
Vehicle movement and AWD noise and vibration – fauna disturbance	No disturbance to native fauna	• Surveys will progressively move along survey lines and will limit exposure to any one receptor. Only a brief nature of noise impact occurs due to AWD being dropped onto plate. • All personnel required to complete site inductions • Meet the requirements of the Environmental Protection Act 1986 • Meet the requirements of this Environmental Plan • Meet the requirements of the APPEA Code of Environmental Practise 2008	Site audits and inspection records to confirm that noise impacts are reduced and managed appropriately, and no fauna are recorded in close proximity to the activities Induction records demonstrate 100% of onsite personnel and contractors have completed site inductions.
Vehicle movement and AWD noise and vibration – sensitive receptor disturbance	No complaints from landholders in relation to noise emissions generated by the activity	• Surveys will progressively move along survey lines and will limit exposure to any one receptor. Only a brief nature of noise impact occurs due to AWD being dropped onto plate. • SSE will record all complaints filed due to noise emissions and any actions taken in response to the complaint.	Site audits and inspection records to confirm that noise impacts are reduced and managed appropriately Any complaints will be recorded in the daily report and mitigated immediately.

Source of Risk	Objectives	Standards	Measurement Criteria
		• SSE will finalise land access agreements prior to entering and disturbing relevant landowner's property. • Seismic survey activities to be limited to daylight hours. • Duration of survey approximately 20 recording days limiting exposure to noise. • All personnel required to complete site inductions • Meet the requirements of the Environmental Protection Act 1986 • Meet the requirements of this Environmental Plan • Meet the requirements of the APPEA Code of Environmental Practise 2008	A vehicle inspection and AWD noise inspection will be part of the daily inspection by the DP. Land access agreement register to confirm all agreements have been obtained and finalised. Site records will verify the start and end dates for seismic activities, which will be <20 days start to finish
Vehicle movement – heritage disturbance	No disturbance to cultural heritage areas	• Seismic survey does not require physical disturbance of the ground. • Survey lines will be limited to existing cleared road reserves, tracks and farmland. • If suspected artefacts are identified during the survey - works to cease in immediate area and heritage expert consulted. • All personnel required to complete site inductions. • Meet the requirements of the *Aboriginal Heritage Act 1972* section 5 • Meet the requirements of this *Environmental Plan*	Site audits and inspection records to confirm use of low impact seismic technology Location of seismic lines within previously disturbed/ cleared areas Records of the pre-survey line inspections will be kept confirming no suspected artefacts were identified where the vehicles and seismic activity takes place Induction records demonstrate 100% of onsite personnel and contractors have completed site inductions
Vehicle movement – weed and diseases management	No unnatural spread of weeds or diseases as all vehicles and equipment have undergone brushing	• Equipment will be dry brushed before entering and leaving each property to eliminate any contamination with adjoining properties • SSE will finalise weed management arrangements with private landowners and local governments to monitor and/or rectify (if require) weeds and/or pathogens introduced or spread as result of the activity.	A vehicle inspection and cleaning record will be part of the daily report compiled by the DP. Location of seismic lines within previously disturbed/ cleared areas Records of daily weather conditions will be recorded as part of the daily report compiled

Source of Risk	Objectives	Standards	Measurement Criteria
		• SSE will record all complaints filed due to weeds and any actions taken in response to the complaint • The DP shall be responsible for ensuring the crew clean the wheels, underside and trays of all vehicles. This will take place in the road reserve prior to entering into any property from the road reserve. • Survey area restricted to regularly driven tracks, fence lines, and areas for farm machinery access. • The Crew will inspect the wheel wells and substructure of the vehicles so that seeds and soil will not adhere to the cleaned vehicle. • Activities will be undertaken in dry conditions only to reduce the risk of Dieback. • All personnel are required to undertake site inductions.	by the DP to ensure activities were undertaken in dry conditions only. Site audits and inspection records verify any weed complaints have been received and managed appropriately via a Complaints register. 100% of personnel are inducted and adequately informed of the importance of not clearing any vegetation. Land access agreements and other agreements register to confirm all weed management agreements have been finalised and reporting of all monitoring activities undertaken.
Fuel handling – fire hazard	No fires occur from activities on site In the event of a fire, adequate management will be performed to minimise the impacts	• Timing of activity is planned during months of reduced fire risk. • Survey restricted to tracks, fence lines, and areas of no combustible vegetation. • Personnel training undertaken in accordance with the ERP. • Fire extinguishers carried in all vehicles. • No smoking prohibited at the site. • No onsite refuelling will occur. • All personnel required to undertake site inductions. • Meet the requirements of the *Bush Fires Act 1954* • Meet the requirements of this *Environmental Plan*	Site records will verify the start and end dates for seismic activities. Records of daily weather conditions will be recorded as part of the daily report. Location of seismic lines within previously disturbed/ cleared areas. Records of fuel usage to be recorded in daily inspections. 100% of personnel are inducted and adequately informed of the importance of not clearing any vegetation. All personnel are required to have undergone training/ familiarisation with the ERP for the site. Training records confirm that personnel are familiar with initial actions, reporting requirements and evacuation/ assembly requirements in response to a fire event.

Source of Risk	Objectives	Standards	Measurement Criteria
			Fire extinguishers are inspected weekly, and a record made in the maintenance register ensuring they are fit for use. The DP shall be responsible for ensuring the field crew refrain from smoking during recording.
Gaseous emissions	Monitor atmospheric emissions arising from the activities	• In accordance with the PGE(E)R, SSE will report on the volumes of atmospheric emissions. • Meet the requirements of the *Environmental Protection Act 1986* • Meet the requirements of this *Environmental Plan* • Meet the requirements of the *Environmental Protection Act 1986*	Quarterly emissions reported to DEMIRS, including volumes of diesel combusted on the site.
Waste Management	No inadequate control of waste materials on site	• Waste bins with lids will be provided and used for all waste. • Waste removed from site daily and disposed of in appropriate location. • Designated person to inspect survey area daily to ensure no waste remains. • All personnel required to undertake site inductions. • Meet the requirements of this *Environmental Plan* • Meet the requirements of the *Soil and Land Conservation Act 1945* • Meet the requirements of the *Environmental Protection Act 1986*	100% of personnel are inducted and adequately informed of the importance of not clearing any vegetation. Waste Disposals will be recorded in the Waste Disposal register Daily inspections will make record of compliance to standards

5.0 Implementation Strategy

SSE have committed to reduce the impacts of the proposed activities on the environment to ALARP. These commitments are implemented via a number of systems, practices and procedures that relate to the activities outlined throughout the EP, which enable adequate strategies to reduce the impact on the environment. SSE's implementation strategy includes:

- Systems, practices and procedures to ensure environmental risks are managed accordingly.
- Roles and responsibilities of personnel associated with the activities to ensure activities are implemented in accordance with this EP.
- Emergency response procedures.
- Training and competencies to ensure personnel have an appropriate level of knowledge regarding the environment and EP conditions.
- Monitoring, auditing and management of non-conformances.
- Reporting requirements and notification commitments.
- Oil spill response plan.
- Record keeping.
- Review of the EP.

A variety of relevant systems and procedures are implemented on behalf of SSE to enhance the implementation strategy, these include HSE Management System, Emergency Response Plan, Oil Spill Contingency Plan, Incident Reporting and Investigation.

The implementation strategy outlines within the EP details the responsibilities/ roles and training/ other requirements for all personnel to establish adequate management controls, monitoring, auditing and reporting requirements for the proposed activities. The EP outlines the type, number and variety of monitoring, auditing and reporting that will be undertaken to ensure compliance of the project.

6.0 Stakeholder Engagement

SSE will engage with the following key stakeholders to discuss the seismic survey prior to the survey taking place. In addition, these stakeholders will be advised when the survey works are complete.

- DBCA
- DEMIRS
- DFES
- Shire Councils
- Relevant landholders
- Traditional Owners

These consultations will be maintained regularly by SSE before, during and after seismic survey activities.

6.1 Indigenous Consultation

SSE commits to continue discussions with the representative bodies of Traditional Owners from the Yamatji Southern Regional Corporation (YSRC), whose land surrounds the project area. Consultation with YSRC has confirmed Heritage surveys are not required, and an Activity Notice Response was provided on behalf of YSRC on the 19 June 2024 that details this agreement. SSE will continue to engage with YSRC over the duration of the seismic activities.

6.2 Private and Government Stakeholder Consultation

Private and Government stakeholders (including Shire Councils, DFES and landholders) have been formally notified of the proposed activities. Consultation with landholders has been undertaken to ensure land access agreements have been provided, SSE will continue consultation with landholders to ensure all land access agreements are finalised prior to entering the relevant landowner's property. Further and ongoing liaison with these stakeholders will be undertaken following EP approval and once project timeframes and commencement dates are finalised.

6.3 Regulation Consultation

DEMIRS and DBCA have and will continue to be involved throughout the seismic survey activities and have been notified and involved in the preparation of this EP and activity decision-making processes. Feedback received from these departments have been incorporated into the activity and have been addressed within this EP.

6.4 Stakeholder Engagement Strategy

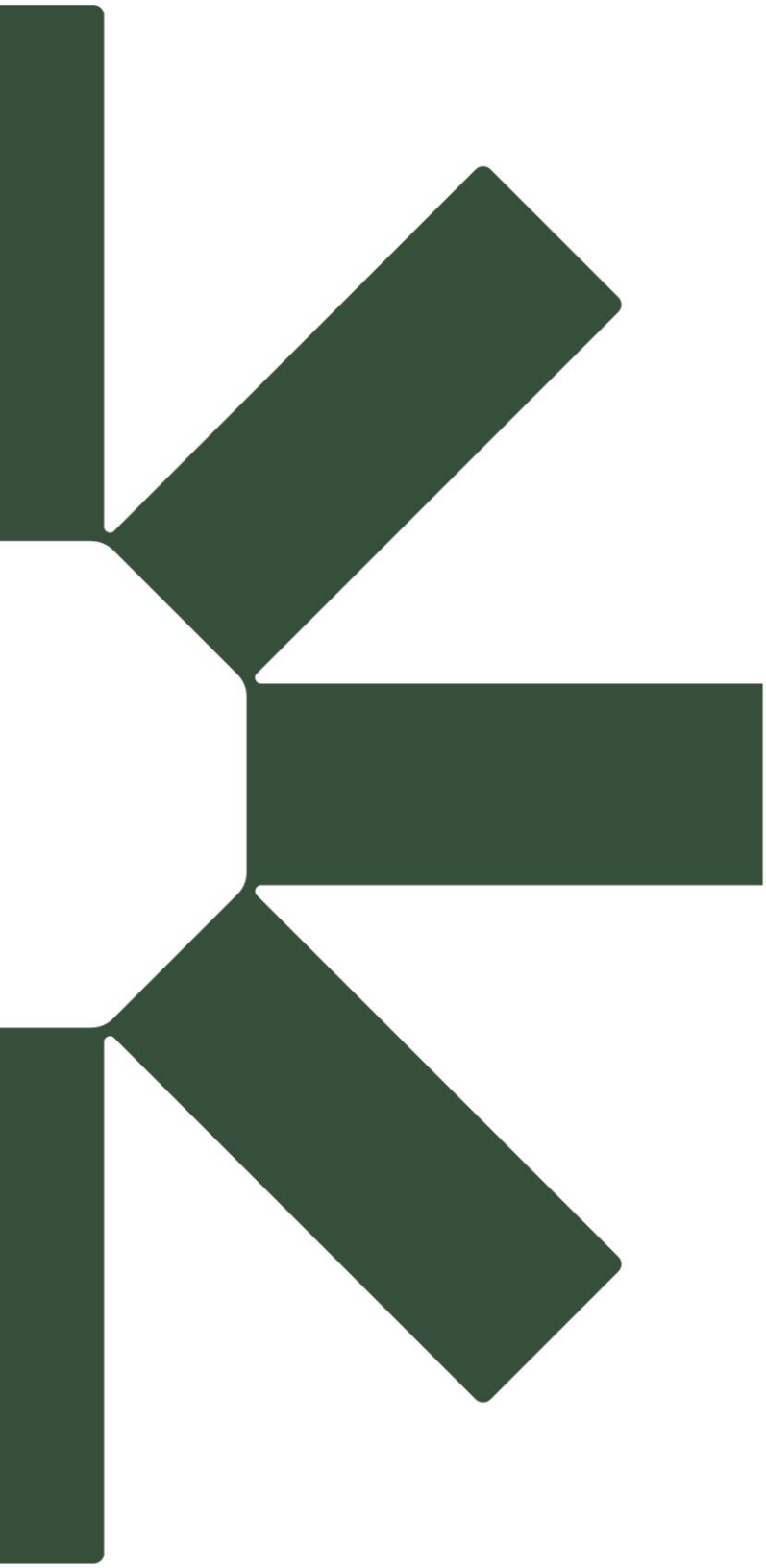
SSE commit to developing strong relationships with community and government stakeholders through comprehensive engagement strategies. A range of formal and informal stakeholder engagement methods including face-to-face meetings, workshops, fact sheet provision etc, are employed by SSE to facilitate effective stakeholder engagement across this project. SSE's Stakeholder Engagement Strategy is provided in whole as Appendix G.

6.5 Ongoing Stakeholder Consultation

Due to the short-term and low disturbance nature of the proposed activities, consultation throughout the duration of the project is expected to be minimal, unless with those directly in contact with the works. Based on commitments to stakeholders and to ensure stakeholder involvement during activities, SSE will:

- Provide updates to stakeholders where planned activities differ from those described within this EP and from what has been previously discussed with said stakeholders.
- Notification to YSRC, DFES, DBCA and DEMIRS prior to mobilisation and demobilisation to/from site.

Stakeholder consultation with continue to be recorded using the Stakeholder Engagement Register and all issues and concerns raised over the course of the project will be addressed directly by SSE's management via direct consultations and discussions with concerned stakeholders.



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