APPENDIX I BUSHFIRE MANAGEMENT PLAN

Environmental
Management Plan

Wiso Basin
Seismic Survey EP200, 205 & 207

Bushfire Management Plan

Wiso Basin Seismic Survey on EP 205 & 207

DOCUMENT CONTROL RECORD

Job	EZ21217
Document ID	229376-21
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2	T. Reilly (EcOz)	R. Hall (EcOz)	J. Phillips (Blue Energy)	7/11/2023

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1 INTRODUCTION

Blue Energy propose to complete a two dimensional (2D) seismic survey within exploration permits (EP) 200, 205 and 207, which is located approximately 465 km south-west of Katherine, Northern Territory. These works will be regulated through an Environmental Management Plan (EMP) approved by the Department of Environment, Parks and Water Security (DEPWS), as per the *Petroleum (Environment) Regulations* (the regulations).

This document describes the Bushfire Management Plan (BMP) for the Project.

1.1 Scope and objectives

The scope of this BMP is to outline the fire risk and management strategies associated with the Project.

This management plan addresses the following:

- Describe bushfire risks associated with the Project.
- Describe fire history within the region of the Project area.
- Describe collaboration with neighbouring landholders to ensure adequate cross-boundary fire management.
- Provide a map which identifies fire management areas/zones on the landholding including access tracks and neighbouring land use.
- Provide specific bushfire management objectives and actions to address identified risks in each fire management area/zone delegated in the Plan.

The management plan is applicable to all activities associated with the 2D seismic survey on EP 200, EP 205 and EP 207 and will be used by all personnel (including contractors) involved in project activities.

The BMP will be reviewed / updated annually, or as new information becomes available, or if there are significant changes to seismic program activities.

2 PROJECT COMPONENTS

Key components associated with the project are described below and shown in Figure 2-1. The 'project area' refers to the physical footprint of the proposed activities.

Seismic survey

The Project comprises of two seismic lines (03B and 06C) which will provide a total data acquisition length of approximately 214 km. The two seismic lines (03B and 06C) are located in bushland and will require line preparation works.

Camp sites

Three camps will be required for this exploration activity. Four camp options have been selected. Locations have been strategically positioned to minimise the number of camps required for the seismic survey (i.e. centrally positioned), to minimise vegetation clearing (i.e. positioned within existing cleared / disturbed areas), to avoid significant habitat areas or threatened species, and to avoid impacts to cultural heritage values (as identified by AAPA and Archaeological Cultural Heritage Assessment).

Camp sites will require a pad to be cleared (dimensions will be approximately 80 x 100 m).

Laydown areas are proposed to occur within the camp pad areas.

Access tracks

No access tracks are required for this program. The proposed seismic lines will be used to access all works areas and camp sites.

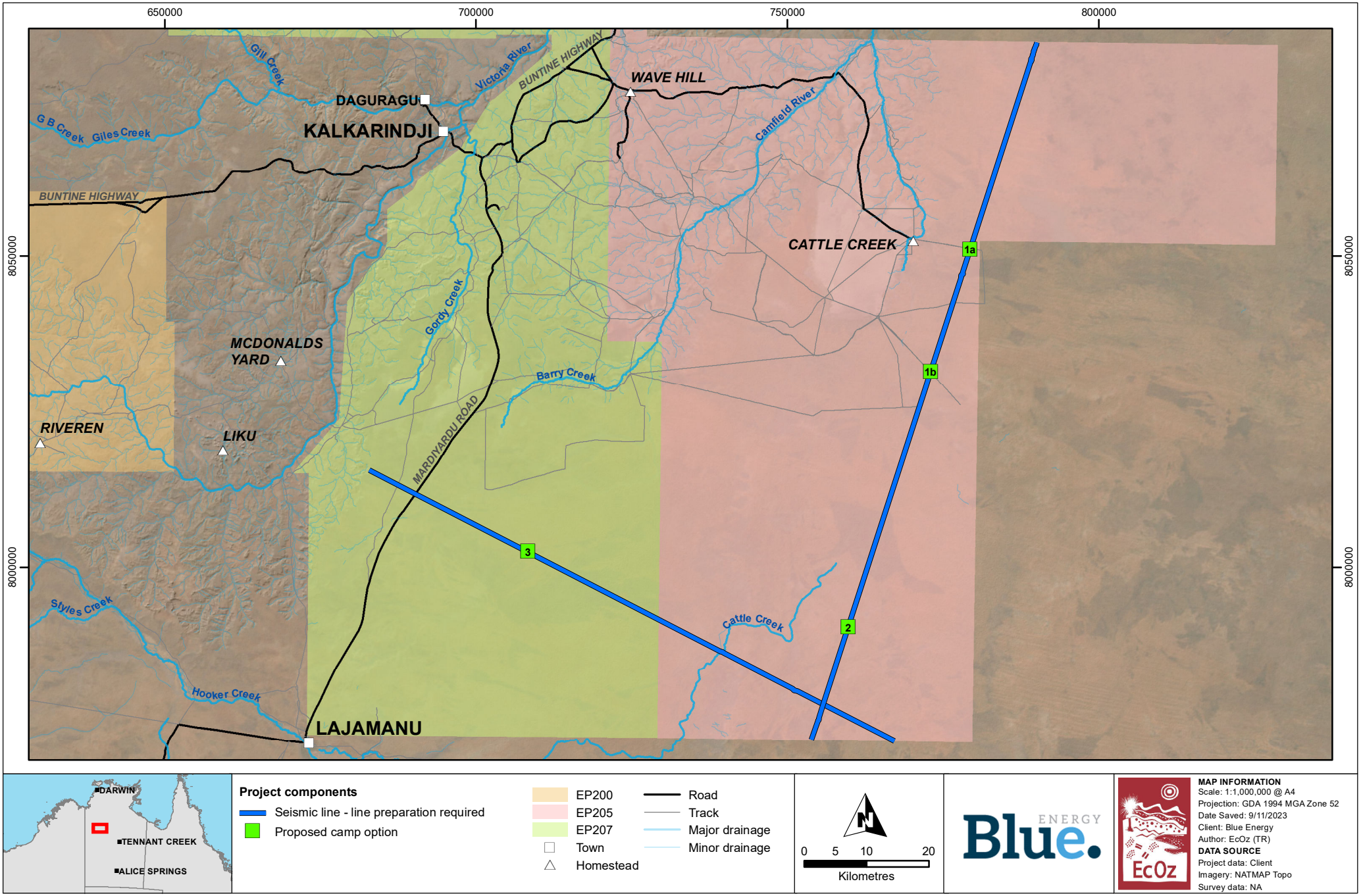

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Figure 2-1. Map of Project components

3 CONTEXT

3.1 Land use / tenure

Property land use is pastoral (cattle). The Project is located within Perpetual Pastoral Lease(s) (PPL).

- Cattle Creek (NT Por 2654)
- Wave Hill (NT Por 2653)

Blue Energy will ensure that the project does not affect the Land Managers' fire management obligations and strategies, through the land use agreement process.

3.2 Fire regulation and legislation

Bushfires NT is responsible for implementing the *Bushfires Management Act*, and operates under a series of policy guidelines designed to achieve its fire management objectives and to support landholders with fire mitigation. The policy guidelines identify the need for individual landholders/managers, be they public or private, to have fire management plans in place which are focused on the pre-suppression of large and intense fires. Bushfires NT's NT wide objectives are:

- Protection of life, property and the environment from the effects of wildfires;
- Maintenance of natural resources, including native ecosystems and productive lands, by the use of appropriate fire regimes.

3.3 Regional fire management plan

The Project area occurs within the Savanna Fire Management Zone of the Northern Territory. Bushfires NT is the lead government agency for this zone. The regional fire management plan applicable to this zone is *Savanna Regional Bushfire Management Plan 2022-23* (DEPWS 2022). The main objectives of the regional plan related to gas exploration are safety (protection of life and property) and asset protection (protect assets and infrastructure). Blue Energy will ensure that these objectives are met for the proposed exploration works.

3.4 Vegetation and landform

Lines 03B and 06C (and associated camps) occur on gently sloping lateritic plains and sandplains that mostly support spinifex (hummock) grasslands with open to scattered shrubs and low trees. The spinifex understory is a fire prone vegetation type. Line preparation is required for these lines and camp pad preparation.

3.5 Fire history

Regional fire history was obtained through North Australia and Rangelands Fire Information (NAFI) (https://firenorth.org.au/nafi3/) – which includes 'fire frequency' (Figure 3-1) and 'time since last burn' (Figure 3-2) since year 2000. Data indicates that fire is a relatively common occurrence for lines 03B and 06C, which is likely associated with spinifex fuel load present within these areas. Data indicates that there has not been any large scale burns along those lines in the past 5 to 6 years, which indicates that spinifex fuel load is likely to be relatively high. Data for line 06A indicates a lower fire history and is proposed to occur in existing track.

Fire history mapping will be revised annually for the duration of exploration works to monitor changes to fire frequency in the region of the Project area as per clause A.3.7(a)(vi) of the Code of Practice.

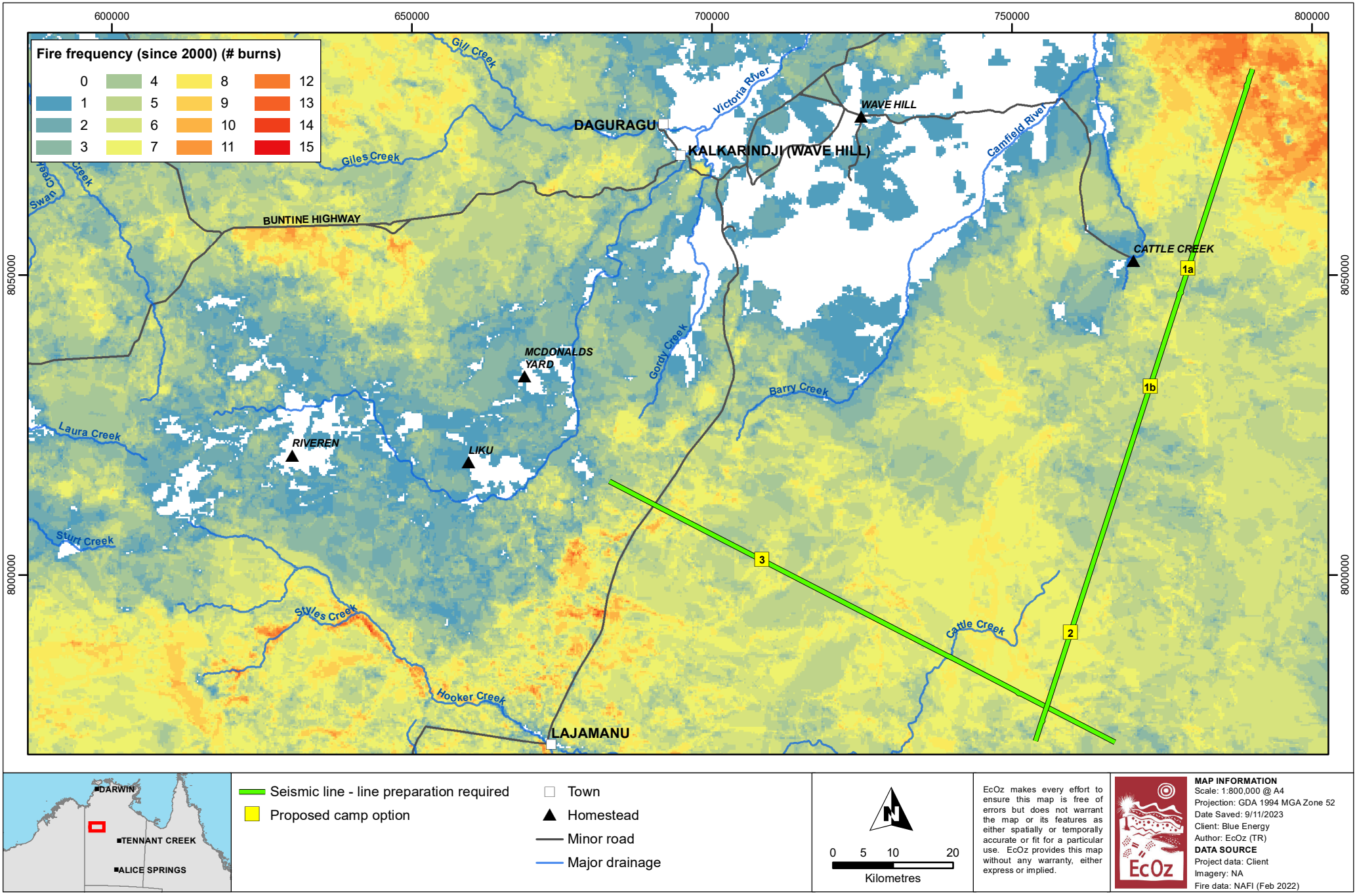

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Figure 3-1. Map of fire frequency (since 2000) within the region of the Project

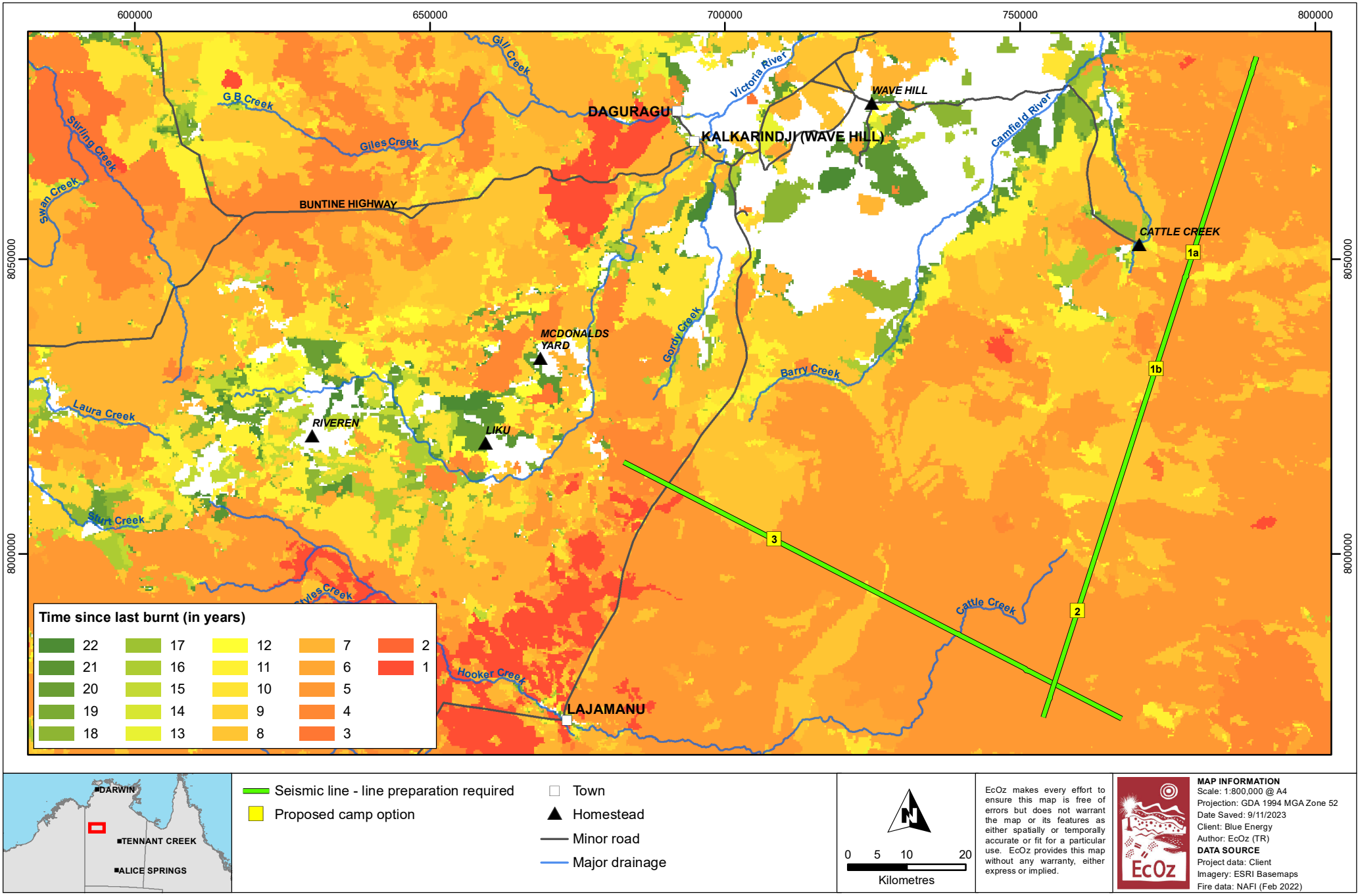

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Figure 3-2. Map of fire time since last burn within the region of the Project

4 MANAGEMENT PLAN

The fire management aim is to successfully complete seismic exploration activities without a bushfire incident.

4.1 Objectives

The main fire management objectives are:

- Prevent any human-induced bushfire ignitions that cause loss of life, property or environmental harm
- Ensure that the Project does not affect existing pastoral fire management obligations and strategies through the land use agreement process

4.2 Fire management risks

- Ignitions (humans and lightning) on or off site resulting in harm to workers, damage or loss of integrity of equipment, delays in operations, and impacts to pasture. Large bushfires are known to occur in the region. Fire source may be natural (i.e. lightning), prescribed (i.e. land management) or accidental/arson (illegal or uncontrolled burn that has been purposely lit).
- Altered landscape fire regimes as a consequence of seismic exploration leading to conflict with adjacent land use (i.e. more or less fires, change in pattern or timing). Current fire frequency data is provided in Section 3.5 and indicates the Project area burns every 5 to 7 years.
- Spread of high fuel load grassy weeds, particularly along seismic lines, increasing fire intensity and frequency (species such as Gamba Grass, Grader Grass and Buffel Grass).

There are no planned activities that require use of fire. The Project will not require any fire (i.e. fuel reduction burning) or flare related activities. As such, the potential impact from the exploration program on the existing fire regime is expected to be very low, assuming that management actions in the plan are suitably implemented.

4.3 Fire management areas and management actions

The following fire management areas have been identified for the purpose of fire management for this project (map provided in Figure 4-1):

- Camp sites / laydowns
- Seismic lines
- Neighbouring property(s) – Cattle Creek Station, Wave Hill Station

Fire danger ratings, bushfire alerts and fire ban advice will be monitored daily using the Bureau of Meteorology / Secure NT / Fire Incident Map / NAFI (refer to Section 4.7 for links). Information will be presented to all staff at daily safety toolbox meetings (or as required if conditions change during a work day) for the duration of the exploration program.

Fire danger ratings are based on the Fire Behaviour Index (FBI) as per forecasts identified by the Bureau of Meteorology (http://www.bom.gov.au/nt/forecasts/fire-danger-ratings.shtml). The Project area is located within 'Gregory South East' fire district. Bushfire alerts and fire ban advice will be determined using SecureNT, Fire Incident Map and NAFI (refer to Section 4.7 for website links).

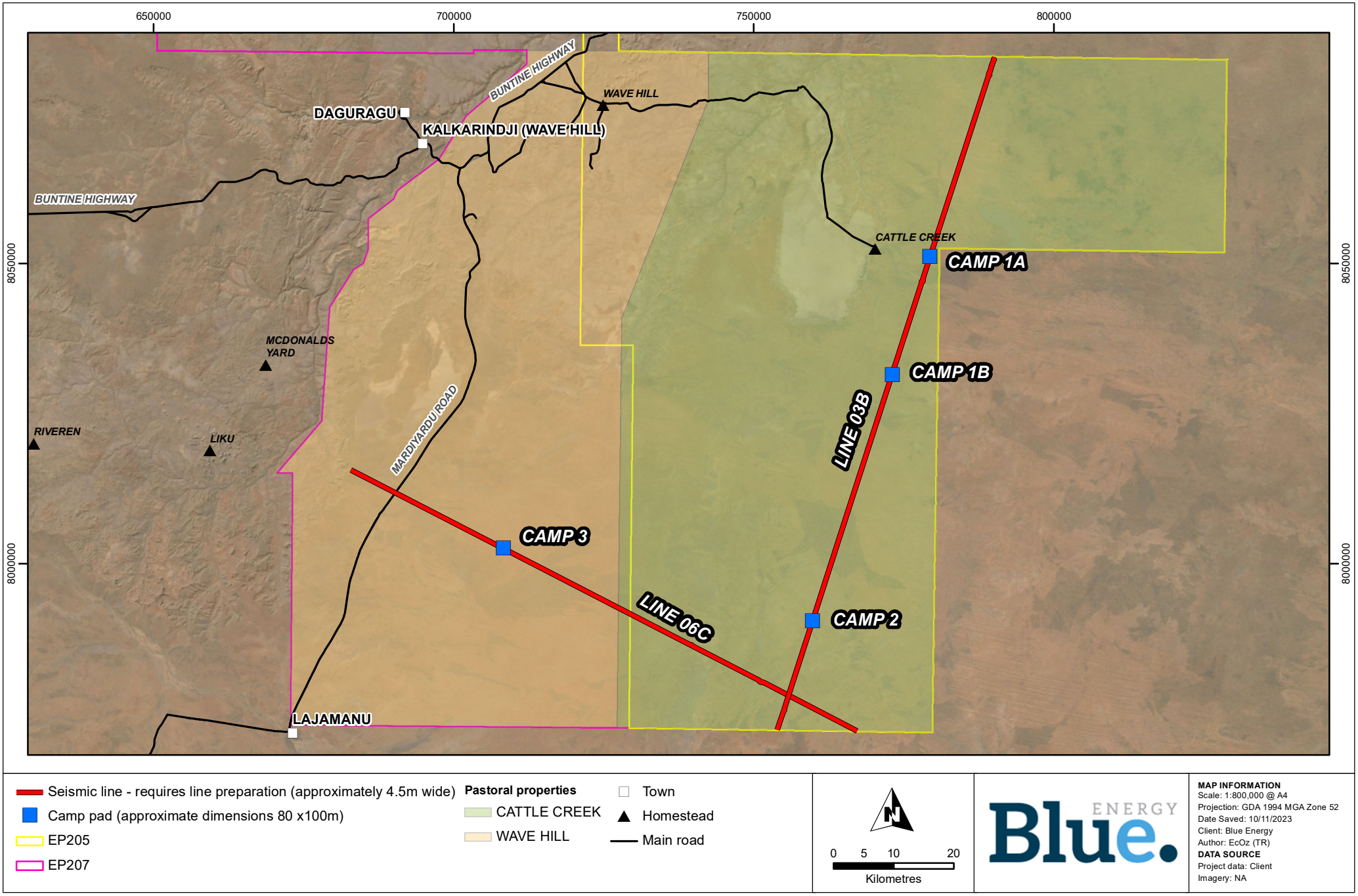

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Figure 4.1 Map showing Fire Management Areas

Table 4-1. Table of fire management actions for each fire management area

Fire management area	Fire management action
All activities / general	• Adequate fire protection equipment to be provided to prevent fires, the spread of fire, injury to personnel, and to ensure local bushfire and other fire regulations are observed. • Ensure all staff are aware of available access tracks in case of emergency evacuation. • Ensure all staff / contractors are trained in operation of firefighting equipment and aware of this Plan • Every vehicle or piece of equipment has relevant fire extinguisher capacity to extinguish a small fire. • All firefighting equipment and water supplies are checked regularly. • Smoking only allowed in designated smoking areas.
Infrastructure Protection Buffer for Camp areas and laydowns	• Remove all vegetation within camp area / laydown, and implement erosion and sediment control plan. • Maintain camp / laydown to be free of vegetation during works program. • Protect infrastructure by maintaining 10 m bare earth buffer around infrastructure and facilities. • Monitor area for grassy weeds and control where appropriate • Site manager to assess fuel load prior to camp establishment and after wet season if infrastructure is still in place. • If high fuel is identified in surrounding vegetation, establish a 20m low fuel zone around the camp area (when infrastructure is in place). This will be via slashing / brush cutting. Prescribed / controlled burns are not proposed for this project.
Seismic lines	• All infrastructure including vehicles and machinery are to be operated and maintained to mitigate risk of ignition, this is particularly important for machinery use for vegetation clearing (as vegetation can build up under vehicles and ignite). • Monitor lines for grassy weeds and control where appropriate.
Neighbouring property(s)	• Planning meeting with station(s) prior to commencing exploration activities • Stations to advise of planned burns (aerial and ground) • Contact stations once activities are completed and all personnel, equipment and infrastructure have departed / been removed from site.

4.4 Annual works calendar

Month	Regional bushfire risk	Planned seismic activities	Fire management action
January	Low	None	No planned fire management activity
February	Low	None	No planned fire management activity
March	Low	None	No planned fire management activity
April	Low	None	No planned fire management activity
May	Low	None	No planned fire management activity
June	Medium	None	No planned fire management activity
July	High	None	No planned fire management activity
August	High	• Meetings	Planning meeting with stations
September	High	• Line preparation • Camp and laydown establishment	• Ensure all firefighting equipment is operational • Monitor NAFI / fire bans / fire alerts • Visually scan horizon for smoke • Establish fire break/buffer around camp area and laydowns • Monitor/control weeds / grassy regrowth within cleared areas • Ensure vehicles and machinery involved in vegetation clearing are suitably cleaned to that vegetation build up under engine does not ignite. • Review the preparedness planning requirements. • Liaise with property managers/neighbours regarding bushfire (where applicable)
October	High	• Seismic acquisition • Camp and laydown maintenance • Decommissioning / rehabilitation	• Ensure all firefighting equipment is operational • Monitor/control weeds / grassy regrowth within cleared areas • Monitor NAFI / fire bans / fire alerts • Visually scan horizon for smoke • Review the preparedness planning requirements. • Liaise with property managers/neighbours regarding bushfire (where applicable)
November	Medium	• Rehabilitation of all disturbed areas (seismic lines, camps and laydowns)	• Ensure all firefighting equipment is operational • Monitor NAFI • Visually scan horizon for smoke • Review the preparedness planning requirements. • Liaise with property managers/neighbours regarding bushfire (where applicable)
December	Low	None	No planned fire management activity

4.5 Preparedness planning

Preparedness planning and reviews will occur for the duration of the exploration activity to ensure that appropriate fire management actions are in place and that staff are aware of contingency plans in the case of a fire event.

For days with an Fire Behaviour Index rating of High, Extreme or Catastrophic (as per Bureau of Meteorology), or if fire alerts (NAFI / SecureNT / Fire Incident Map) are active or presenting with a known risk (i.e. fire in the area), personnel responsible for fire management (i.e. site supervisor) must execute their contingency plans which need to encompass the following:

- Alert all staff to fire rating danger, and wind direction forecasts.
- Contact neighbours (stations) if fire / smoke identified nearby
- Ensure days' work plans are suitable for current FBI rating
- Procedure on identifying and notifying of a bushfire. Ensure all staff, contractors (etc.) know that they must immediately report any form of fire activity, near or far and who to report to.
- Staff working away from the Infrastructure Protection Buffer must be aware of heightened fire risk.
- Critical equipment to be removed / isolated / shutdown where applicable (i.e. equipment is stored within the Infrastructure Protection Buffer area)
- Determine safe evacuation routes and muster points, and closest safe areas to evacuate too.
- Ensure communication and notification channels are readily available and functioning
- Ensure any firefighting equipment is available and functioning

4.6 Wildfire response

Wildfire is an uncontrolled fire in an area of combustible vegetation. They are generally started by people or lightening. If fires / smoke is observed within or surrounding the works area it will be assumed that a wildfire is present, and the following actions must be followed by the person first responding to a fire:

- Remove yourself and others from potentially dangerous situations
- Raise the alarm with the Site Supervisor
- Father the following information (once mustered in a safe location)
    - Location (description or GPS coordinates)
    - Immediate threats to life, property and the environment
    - Fire characteristics (what is burning, direction and speed of travel)
    - Weather – wind strength and direction
    - Response actions in progress, and by who
    - Response action required
    - Identify safe access / and evacuation areas
- Notify site supervisor (or equivalent) and communication information identified above.
- Site supervisor (or equivalent) are to notify property contacts (i.e. relevant stations) and Bushfires NT, and to arrange what response should be taken to the fire.
- Emergency services (call "000" or "112" for mobile phones) will be contacted if site personnel or pastoralists are unable to manage the situation.

4.7 Contacts

Entity	Name	Contact details
Blue Energy Project Manager	Mr William Ma	0405 353 383
Seismic contractor Site Supervisor	TBC	TBC
Cattle Creek Station	[redacted]	[redacted]
Wave Hill Station	[redacted]	[redacted]
Bushfire NT	Head Office	(08) 8922 0840 or (08) 8922 0844
Bushfire NT	Katherine	(08) 8973 8871 or (08) 8973 8872
Bushfire NT	VRD	(08) 8973 8870
National Response Centre	NA	1800 076 251
Emergency	NA	000 or 112 (mobile)
Key wildfire and weather forecasts information sources	SecureNT (fire bans/alerts)	https://securent.nt.gov.au/respond/bushfire-alerts
	Fire incident map	https://pfes.nt.gov.au/incidentmap/
	NAFI (fire mapping)	https://firenorth.org.au/nafi3/
	Fire danger rating	http://www.bom.gov.au/nt/forecasts/fire-danger-ratings.shtml
	General forecasts	http://www.bom.gov.au/places/nt/kalkarindji/forecast/
	Wind forecast	https://wind.willyweather.com.au/nt/katherine/kalkarindji.html

5 REFERENCES

DEPWS (2022). *Savanna Regional Bushfire Management Plan 2022-23*. Prepared by Department of Environment, Parks and Water Security (DEPWS), Bushfires NT, Katherine (Northern Territory Government).

https://nt.gov.au/__data/assets/pdf_file/0007/461176/savanna-regional-bushfire-management-plan.PDF

APPENDIX A BUSHFIRE MANAGEMENT PLAN SUMMARY PAGE

BUSHFIRE MANAGEMENT PLAN

SEISMIC EXPLORATION LINES 03B and 06C

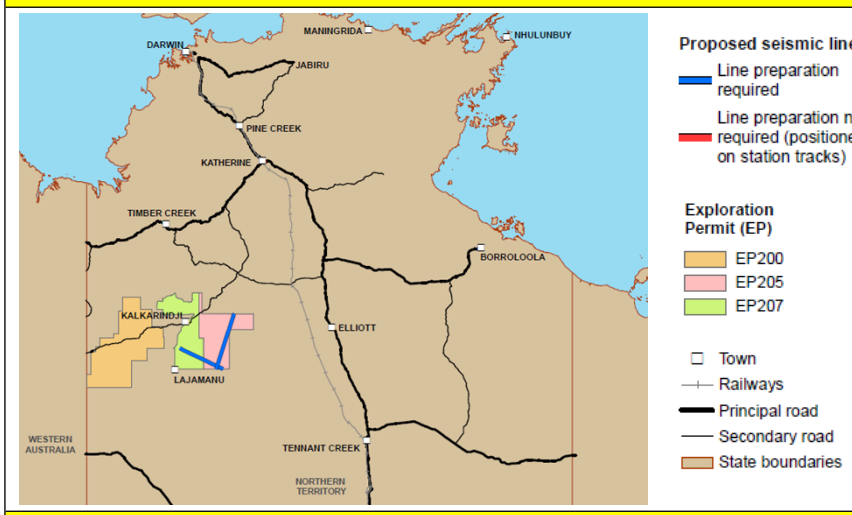
EP205, EP207

26 July 2023

Prepared by EcOz and Blue Energy

STAKEHOLDER / ENTITY	NAME	CONTACT
Project Manager	Mr William Ma	0405 353 383
Site Supervisor	TBC	TBC
Cattle Creek Station	[redacted]	[redacted]
Wave Hill Station	[redacted]	[redacted]
Bushfire NT	Head office and VRD	Head office - (08) 8922 0840 or (08) 8922 0844; VRD - (08) 8973 8870
Emergency	NA	000 or 112 (mobile)
SecureNT (fire bans/alerts)	NA	https://securent.nt.gov.au/respond/bushfire-alerts
Fire incident map	NA	https://pfes.nt.gov.au/incidentmap/
NAFI (fire mapping)	NA	https://firenorth.org.au/nafi3/
Fire danger rating	NA	http://www.bom.gov.au/nt/forecasts/fire-danger-ratings.shtml

LOCATION



FIRE MANAGEMENT AIM

- The fire management aim is to successfully complete seismic exploration activities without a bushfire incident.

FIRE MANAGEMENT OBJECTIVES

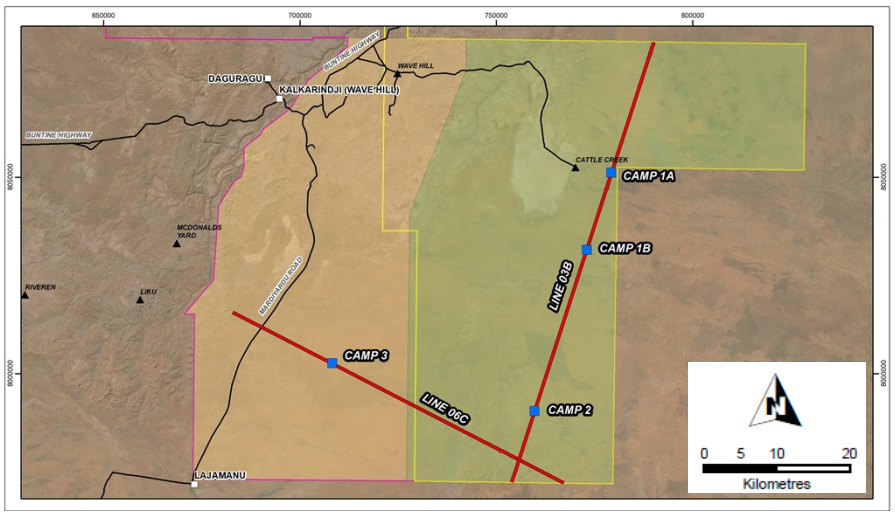
- Prevent any human-induced bushfire ignitions that cause loss of life, property or environmental harm
- Ensure that the Project does not affect existing pastoral fire management obligations and strategies through the land use agreement process

FIRE MANAGEMENT RISKS

- Ignitions (humans and lightning) on or off site resulting in harm to workers, damage or loss of integrity of equipment, delays in operations, and impacts to pasture. Large bushfires are known to occur in the region. Fire source may be natural (i.e. lightning), prescribed (i.e. land management) or accidental/arson (illegal or uncontrolled burn that has been purposely lit).
- Altered landscape fire regimes as a consequence of seismic exploration leading to conflict with adjacent land use (i.e. more or less fires, change in pattern or timing). Current fire frequency data indicates the Project area burns every 5 to 7 years, and hasn't burnt in the past 5 years (in general).
- Spread of high fuel load grassy weeds, particularly along seismic lines, increasing fire intensity and frequency (species such as Gamba Grass, Grader Grass and Buffel Grass).

There are no planned activities that require use of fire (i.e. fuel reduction burning or flare related activities).

FIRE MANAGEMENT ZONES / AREAS



FIRE MANAGEMENT ACTIONS

Area / zone	Management action
All activities / general	• Adequate fire protection equipment to be provided to prevent fires, the spread of fire, injury to personnel, and to ensure local bushfire and other fire regulations are observed. • Ensure all staff are aware of available access tracks in case of emergency evacuation. • Ensure all personnel are trained in operation of firefighting equipment and aware of this Plan • Every vehicle / equipment has relevant fire extinguisher capacity to extinguish a small fire. • All firefighting equipment and water supplies are checked regularly. • Smoking only allowed in designated smoking areas.
Infrastructure Protection Buffer for Camp areas and laydowns	• Remove all vegetation within camp area / laydown, and implement ESCP. • Maintain camp / laydown to be free of vegetation during works program. • Protect infrastructure by maintaining 10 m bare earth buffer around infrastructure and facilities. • Monitor area for grassy weeds and control where appropriate • Site manager to assess fuel load prior to camp establishment and after wet season if infrastructure is still in place. • If high fuel is identified in surrounding vegetation, establish a 20m low fuel zone around the camp area (when infrastructure is in place). This will be via slashing / brush cutting. Prescribed / controlled burns are not proposed for this project.
Seismic lines	• All infrastructure including vehicles and machinery are to be operated and maintained to mitigate risk of ignition, this is particularly important for machinery use for vegetation clearing (because vegetation can build up under vehicles and ignite). • Monitor lines for grassy weeds and control where appropriate.
Neighbouring property(s)	• Planning meeting with station(s) prior to commencing exploration activities • Stations to advise of planned burns (aerial and ground) • Contact stations once activities are completed and all personnel, equipment and infrastructure have departed / been removed from site.

PREPAREDNESS PLANNING

For days with an FBI rating of High, Extreme or Catastrophic, or if fire alerts (NAFI / SecureNT / Fire Incident Map) are active or presenting with a known risk (i.e. fire in the area), personnel responsible for fire management (i.e. site supervisor) must execute contingency plans which need to encompass the following:

- Alert all staff to fire rating danger, and wind direction forecasts.
- Contact neighbours (stations) if fire / smoke identified nearby
- Ensure days' work plans are suitable for current FBI rating
- Procedure on identifying and notifying of a bushfire. Ensure all staff, contractors (etc.) know that they must immediately report any form of fire activity, near or far and who to report to.
- Staff working away from the Infrastructure Protection Buffer must be aware of heightened fire risk.
- Critical equipment to be removed / isolated / shutdown where applicable (i.e. equipment is stored within the Infrastructure Protection Buffer area)
- Determine safe evacuation routes and muster points, and closest safe areas to evacuate too.
- Ensure communication and notification channels are readily available and functioning

  Ensure any firefighting equipment is available and functioning

WILDFIRE RESPONSE

If fires / smoke is observed within or surrounding the works area it will be assumed that a wildfire is present, and the following actions must be followed by the person first responding to a fire:

- Remove yourself and others from potentially dangerous situations
- Raise the alarm with the Site Supervisor
- Father the following information (once mustered in a safe location)
  - Location (description or GPS coordinates)
  - Immediate threats to life, property and the environment
  - Fire characteristics (what is burning, direction and speed of travel)
  - Weather – wind strength and direction
  - Response actions in progress, and by who
  - Response action required
  - Identify safe access / and evacuation areas
- Notify site supervisor (or equivalent) and communication information identified above.
- Site supervisor (or equivalent) are to notify property contacts (i.e. relevant stations) and Bushfires NT, and to arrange what response should be taken to the fire.
- Emergency services (call "000" or "112" for mobile phones) will be contacted if site personnel or pastoralists are unable to manage the situation.

ANNUAL WORKS CALENDAR

Month	Fire risk	Planned works	Fire management action
Jan	Low	None	No planned fire management activity
Feb	Low	None	No planned fire management activity
Mar	Low	None	No planned fire management activity
Apr	Low	None	No planned fire management activity
May	Low	None	No planned fire management activity
Jun	Medium	None	No planned fire management activity
Jul	High	None	No planned fire management activity
Aug	High	• Meetings	Planning meeting with stations
Sep	High	• Line preparation • Camp and laydown establishment	• Ensure all firefighting equipment is operational • Monitor NAFI / fire bans / fire alerts • Visually scan horizon for smoke • Establish fire break/buffer around camp area and laydowns • Monitor/control weeds / grassy regrowth within cleared areas • Ensure vehicles and machinery involved in vegetation clearing are suitably cleaned to that vegetation build up under engine does not ignite. • Review the preparedness planning requirements. • Liaise with property managers/neighbours regarding bushfire (where applicable)
Oct	High	• Seismic acquisition • Camp and laydown maintenance • Decommissioning / rehabilitation	• Ensure all firefighting equipment is operational • Monitor/control weeds / grassy regrowth within cleared areas • Monitor NAFI / fire bans / fire alerts • Visually scan horizon for smoke • Review the preparedness planning requirements. • Liaise with property managers/neighbours regarding bushfire (where applicable)
Nov	Medium	• Rehabilitation of all disturbed areas (seismic lines, camps and laydowns)	• Ensure all firefighting equipment is operational • Monitor NAFI • Visually scan horizon for smoke • Review the preparedness planning requirements. • Liaise with property managers/neighbours regarding bushfire (where applicable)
Dec	Low	None	No planned fire management activity

APPENDIX JWASTE AND WASTEWATER MANAGEMENT PLAN

Environmental Management Plan

Wiso Basin Seismic Survey EP200, 205 & 207

Waste and Wastewater Management Plan

Wiso Basin Seismic Survey on EP 205 & 207

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3	T. Reilly	R. Hall (EcOz)	J. Phillips (Blue Energy)	9 Nov 2023

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Tables

1 INTRODUCTION

1.1 Context

Blue Energy is a rapidly evolving oil and gas exploration company strategically positioned with abundant conventional and unconventional assets throughout Queensland and the Northern Territory to meet the rising demand for cleaner energy.

Blue Energy propose to complete a two dimensional (2D) seismic survey within exploration permits (EP) 205 and 207, which is located approximately 465 km south-west of Katherine, Northern Territory. The Project will involve two seismic lines (total length 214 km) and three temporary exploration camps. Seismic lines will be used for access to works areas and camp sites during the program.

These works will be regulated through an Environmental Management Plan (EMP) approved by the Department of Environment, Parks and Water Security (DEPWS).

This document describes the Waste and Wastewater Management Plan (WWMP) for the Project.

1.2 Purpose and Scope

Improperly managed wastes are recognised as a hazard with potential negative impact from 2D seismic survey works. This report details the sources of waste and wastewater, and management and monitoring strategies to limit any impacts, as well as assigning responsibilities to ensure these strategies are implemented.

2 RESPONSIBILITIES

Blue Energy will be responsible for ensuring that project wastes are managed in a manner consistent with Blue Energy policies and procedures including:

- Development and control of this Waste and Wastewater Management Plan including:
  - Collecting and maintaining an inventory of waste management
  - Developing continual improvement strategies
  - Reporting on compliance with the plan
  - Communicating requirements of the plan to personnel, contractors and authorities
  - Provision of waste awareness training to personnel and contractors.
- Monitoring waste management performance of contractors by undertaking regular audits.
- Ensure all waste management facilities are able to receive the wastes assigned to them.

Project contractors are responsible for ensuring that all types of waste are managed in accordance with this Waste and Wastewater Management Plan including:

- Compliance with Blue Energy policies and procedures and any other relevant legislative requirements.
- Storage of waste in accordance with this plan.
- Proper management and disposal of waste through provision of waste generation and waste management data.
- Auditing of compliance against this plan.
- Training of staff as required.

3 SOURCES OF WASTE

During the proposed 2D Seismic exploration program, waste will be managed in accordance with the internationally accepted guide for prioritising waste management practices with the objective of achieving optimal environmental outcomes. Waste will be managed in accordance with the following hierarchy principals:

1) **AVOID**: eliminate the generation of wastes through design modification.
2) **REDUCE**: reduce unnecessary resource use or substitute a less resource intensive product or service.
3) **RE-USE**: reuse a waste without further processing.
4) **RECYCLE**: recover resources from a waste.
5) **TREATMENT**: treat the waste to reduce the hazard of the waste prior to disposal.
6) **DISPOSAL**: disposal of waste if there is no viable alternative

The characterisation & separation of waste will be conducted as far as reasonably practicable at the source.

3.1 Liquid waste

Liquid waste may be produced in the following ways:

- Parking, refuelling and waste storage areas – used oil, oily waters
- Wastewater management system at camp sites – Grey water and sewage

3.2 Solid waste

Solid waste will be produced in the following ways:

- General site:
    - Food waste
    - Paper and cardboard
    - Plastics
    - Glass
    - Hazardous waste (e.g. small batteries).
- Supply of materials – plastic and metal containers, packaging material
- Vehicles and mobile plant – used tyres, batteries, waste hydrocarbons, air filters
- First Aid – medical and biological waste.

3.3 Hazardous waste

A material that is an explosive, irritant, flammable, toxic, carcinogenic or corrosive is classed as a hazardous waste. Examples of hazardous waste include oil, chemical containers, explosives, batteries, aerosols, coolants, paint and paint tins, tyres and fluorescent light tubes etc. Due to their hazardous properties, materials in this waste stream must be dealt with separately from other waste and in an approved manner.

Hazardous waste receptacles must display correct and prominent signage. Hazardous wastes, such as fuels, oils, lubricants, batteries and chemicals, are to be contained within a bunded area until transport for disposal at a facility licenced to accept these materials. Consideration as to whether this storage area should be covered also needs to be made depending on the time of year.

4 WASTE RISK ASSESSMENT

The environmental, heritage and social risks associated with the project activities, specific to wastewater, have been assessed in the EMP, residual risks associated with waste were considered low. Table 4-1 details risk mitigation measures, ALARP rationale, environmental outcomes, performance measures, monitoring and records, reporting and responsibility.

A description of the environment, including environmental and cultural sensitivities, with the potential to be impacted by a spill is provided in the EMP. The sensitive receptors relevant to this project include:

- Watercourses
- Water features (i.e. Gilgai)
- Communities
- Homesteads
- Cultural heritage places
- Restricted Works Areas (as identified in AAPA Authority Certificate)

Table 4-1. Risk mitigation measures

RISK	Contamination from wastewater and general waste
Activities and related hazards	• Camp management has the potential to cause: ○ Contaminated soil from wastewater from camp; ○ general waste from all activities
Mitigation measures	• Designated waste storage/irrigation area will be located away from sensitive receptors area such as waterways or drainage lines • Wastewater will be treated to the required environmental guidelines for advanced secondary effluent (Class "B") • Designated waste storage and handling area to be planned for and provided onsite. • Removal and disposal of hazardous wastes to be in accordance with NT hazardous waste disposal requirements. • Sufficient waste receptacles will be provided on site and any work areas. • Waste will be segregated for ease of disposal. • All staff to be informed of waste management plan; regular inspections to ensure compliance
ALARP rationale	• All waste will be collected, treated and disposed of correctly. This reduces the risk to ALARP as there are no further actions that can be taken to reduce risk. • Wastewater will be stormed, treated and irrigated as per industry best practice. • The Code of Practice requires storages of wastewater to meet the 0.1% AEP freeboard requirement. This indicates that industry standard for wastewater management and storage have been adopted, limiting the risk.
Environmental outcome	• No impacts to soil, surface water, groundwater, sensitive habitats and air quality. • No attraction of pest species from waste storage (i.e. food scraps). • No adverse impact on soil, surface water, groundwater or sensitive habitats
Performance Standard	• All wastewater treated to the required effluent class.
Measurement criteria	• Weekly inspections of waste storage • Waste generation to be reduced through the implementation of recycling. • Maintain waste register, including receipts to verify waste has been properly disposed of. • Weekly inspection of wastewater disposal area
Reporting	• Annual environmental performance report will be submitted to DEPWS
Responsibility	• Project Manager
CODE	• A.3.1 Site Selection and Planning • A.3.8 Containment of Contaminants • C.7.2 Spill Management Plan
Guidelines and legislation	• *Waste Management and Pollution Control Act* 1998 • Code of Practice for Wastewater Management 2020 • National Environment Protection (Assessment of Site Contamination) Measure.

5 WASTE MANAGEMENT

Appropriate management of wastes will assist in avoiding solid and liquid waste discharges into the surrounding environment. It is essential that wastes are appropriately stored, collected and disposed of, to minimise the accidental spillage/leakage of potentially harmful products into the environment.

5.1 Handling and segregation of waste

All wastes generated during the day e.g. at the location of exploration activities, is to be conveyed back to the site waste facilities at the end of the day.

Segregating waste at the source increases the efficiency throughout the waste management process, reduces the volume of waste going to landfill and increases the volume of recyclable material by avoiding contamination.

The site will be equipped with skip bins where required and waste will be segregated into the following streams:

- Metals
- Plastics
- Paper and cardboard
- Putrescibles
- Hazardous waste.

Grey water from kitchen and showering facilities at the campsite will be managed in accordance the Code of Practice for Wastewater Management 2020.

Camp grey and black water waste will be managed through mobile onsite Sewerage Treatment Plants (STP), all camp generated wastewater is piped from camp to the STP units to undergo the micro-bacteria treatment process to breakdown solids and treat the liquid waste to permitted classification prior to irrigating to ground.

The seismic contractor will manage the process required for the preparation and submission of a 'Notification for installation of wastewater management system treatment outside building control' and the installation of a mobile STP system for two campsites. Site and soil evaluation will be completed prior to using campsites in accordance with AS 1547 and NT Code of Practice for Wastewater Management 2020.

The seismic contractor will engage NT based hydraulic engineering consultants to conduct the required desktop assessments, design drawings for wastewater disposal and report of the soil landscape conditions for temporary camps in accordance with the NT Department of Environmental Health. This is to demonstrate compliance with the NT Code of Practice as part of the approval process. The seismic contractor will confirm in the report disposal and accommodation locations satisfies all setback requirements in relation to bores, natural water courses and wetlands/stock days.

5.2 Disposal of waste

The volume of waste produced during the 2D seismic survey is likely to be small. All wastes, specifically listed wastes (as described in Schedule 2 of the *Waste Management and Pollution Control (Administration) Regulations*) generated as part of the regulated activity will be removed from the project area, for disposal or recycling at a licensed facility authorised to receive those wastes (as summarised in the NT Listed Waste Company summary spreadsheet). Table 5-1 below provides the waste disposal methods for the various waste sources.

Table 5-1. Waste management summary

Waste source	Indicative volume	Disposal method
Putrescible waste	<400kg	**Disposal:** Collected in dedicated waste bins for transport to an approved landfill site.
Paper and cardboard	<300kg	**Recycled:** Collected in dedicated waste bins for recycling at an off-site facility.
Glass and cans	<100kg	**Recycled:** Collected in separate waste bins for recycling at an off-site facility.
Scrap metal	<1 tonne	**Recycled:** Collected in designated skip for recycling at an offsite facility.
Used chemical and fuel drums	<500kg	**Recycled:** Collected in designated skip for recycling at an offsite facility.
Chemical wastes	<100L	**Re-use / disposal:** Collected in approved containers for disposal at approved landfill or returned to supplier.
Oily rags, oil/fuel contaminated materials, filters and other hydrocarbon materials	<100kg	**Recycled / Disposal:** Used oil will be collected in suitable containers for disposal at approved landfill or recycled at a recycling facility
Timber pallets	<500kg	**Recycled:** Collected in designated skip for recycling at an offsite facility.
Vehicle tyres	<500kg	**Recycled / Disposal:** Tyres will be collected in skip for disposal at approved landfill site or recycled at a recycling facility
Domestic wastewater – grey water and treated sewage effluent	<900m^3	**Recycled:** Reticulated collection, on-site treatment and disposal via irrigation
Domestic grey water	<400m^3	**Recycled:** Reticulated collection, on-site treatment and disposal via irrigation
Domestic sewage	<100m^3	**Disposal:** Collection and storage on-site, disposal off-site by licensed contractor

5.3 Monitoring

A monitoring program will be implemented to ensure all waste management actions are conducted in accordance with applicable legislation, International guidelines and company standards. Monitoring will assist in ensuring that Blue Energy avoid and minimise the risk of pollution due to waste storage, transfer, treatment and final disposal activities, through early detection and therefore early mitigation of potential polluting events.

The following waste monitoring activities will be conducted:

- A waste register/inventory will be kept to assist in identification of excessive wastage. The inventory will detail the number of skips filled, types of waste generated and location of final disposal (e.g. landfill, recycled, etc.).
- Waste storage areas will be inspected at least fortnightly (twice weekly during wet weather). Inspections will analyse integrity of bunds, condition of storage containers/skips, appropriate labelling, and that wastes are properly segregated and covered. Non-compliances and incidents will be documented in the inventory/register along with corrective actions taken to control and minimise environmental harm.
- As per C.6.1, the movement of water and wastewater will be tracked and will include:
    - i. volumes of water and wastewater used for purposes including dust suppression and construction water;
    - ii. volumes of water and wastewater removed from site and its destination (whether by vehicle or pipeline) including details of the licence number of the any licensed waste transporters; and
    - iii. volumes of any spills of water or wastewater.
- Wastewater tracking will be documented in an auditable chain of custody system and will be in accordance with other legislative requirements such as those imposed under the Waste Management and Pollution Control Act 1998 (NT) and the Radiation Protection Act 2004 (NT).
- Wastewater tracking documentation will be reported to the Minister at least annually.

5.4 Interaction with wildlife, stock and humans

Management and control methods will be implemented to minimise the risk of humans, wildlife and stock, interacting with stored waste. Control measures will include fencing, signage and fauna proof barriers as necessary. The inherent risk of interaction is considered low for this seismic program.

APPENDIX K SPILL RESPONSE MANAGEMENT PLAN

Environmental Management Plan

Wiso Basin Seismic Survey EP200, 205 & 207

Spill Response Management Plan

Wiso Basin Seismic Survey on EP 205 & 207

Blue Energy

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1 INTRODUCTION

1.1 Context

Blue Energy is a rapidly evolving oil and gas exploration company strategically positioned with abundant conventional and unconventional assets throughout Queensland and the Northern Territory to meet the rising demand for cleaner energy.

Blue Energy propose to complete a two dimensional (2D) seismic survey within exploration permits (EP) 205 and 207, which is located approximately 465 km south-west of Katherine, Northern Territory. The Project will involve two seismic lines (total length 214 km) and three temporary exploration camps. The program will utilise proposed seismic lines for access to works areas and camp sites.

These works will be regulated through an Environmental Management Plan (EMP) approved by the Department of Environment, Parks and Water Security (DEPWS).

This document describes the Spill Response Management Plan (SRMP) for the Project.

1.2 Purpose and scope

Accidental spills of potentially hazardous material may result in contamination of land and water. This Spill Response Management Plan outlines appropriate procedures for reducing the likelihood of spills and the severity of impact from spills.

2 ISSUE AND IMPACT

2.1 Chemicals and wastes stored on site

The chemicals that will be stored onsite include:

- diesel fuel
- lubricating and hydraulic oil for machines
- solvents and degreasers etc

During the wet season, the transport of chemicals on unsealed roads will not be undertaken.

All loading, unloading, transfer and refuelling operations are to be undertaken in designated areas, with portable bunding and away from any sensitive receptors including AAPA Restricted Works Areas. Blue Energy will ensure access tracks used for transporting fuel are adequate and safe. All transport of fuel is to be carried out during daylight hours only.

Use, storage and handling of fuel, chemicals and oils on site:

- must comply with WHS legislation
- be in accordance with their approved safety data sheet
- must be stored to prevent release to the environment and to contain any spills
- liquid hydrocarbons, whether separated or mixed with other fluids at a concentration greater than 1% by volume, must not be stored in any open top structure or pit

Any hazardous chemicals or those that may cause environmental harm are to be stored within secondary containment.

Secondary containment must meet all of the following:

- sufficient capacity to hold 100% of the volume of the largest container stored in the area plus 10%, unless the container is equipped with individual secondary containment
- permeability able to contain materials or waste until it can be removed or treated
- provide for separation of clean and dirty water
- be compatible with the material or waste stored or used within the containment
- be resistant to physical, chemical and other failure during handling, installation and use
- be maintained in good order at all times
- secondary containment requirements can be met with double-lined or double-walled storage tanks.

Daily inspections of fuel and chemical storage areas will be undertaken, including containment areas and structures, containers and spill kits. If the containment is damaged or compromised, repairs must be carried out as soon as practicable.

Materials that escape from primary containment or are otherwise spilled onto secondary containment shall be removed as soon as possible.

Inspection reports and maintenance records of secondary containment shall be kept.

2.2 Spill scenarios

Only limited chemicals and hazardous materials will be used during the seismic survey; however, there remains a risk of contamination as a result of spills from the following sources:

- Fuel spill during refuelling of vehicles and machinery.
- Inappropriate storage or handling of materials used during vehicle maintenance works e.g. lubricant, oil, used batteries etc.
- Diesel fuel leakage.
- Inappropriate storage or handling of paints and solvents used in maintenance of vehicles and equipment.

Spills can result in the contamination of land and water (including groundwater). This in turn can lead to impacts to ecosystem function and health, vegetation death, respiratory disorders, and toxicity to individual organisms (including people).

The steps involved in cleaning up severe or minor spills are very similar. The difference lies in the type and degree of hazard, location of the spill, equipment required to clean up the spill and required personal protective equipment.

It is important to know what you are dealing with, appropriate training to deal with the spill, and the necessary equipment to clean up the spill.

Health and safety comes first. DO NOT attempt to clean up or contain a spill if you do not have the necessary skills and equipment, or you are putting yourself or others at further risk.

Risks associated with spills have been assessed in the EMP. Table 2-1 below provides a summary of spill scenarios and management measures.

Table 2-1. Summary of spill scenarios

Spill scenario	Duration	Mechanisms	Location	Quality	Quantity	Management measures	Monitoring	Receptors
Spills from chemical handling and storage onsite	Duration of works	Rupture of containers Spill during handling	Chemical storage area Re-fuelling area	Chemicals listed	<1000L for diesel fuel <100L for all other chemicals	All personnel using chemicals will be trained in their use Any hazardous chemicals or those that may cause environmental harm are to be stored within secondary containment. As described above. Designated storage areas with appropriate segregation of in compatible chemicals. General purpose and hazardous substance spill kits available at appropriate locations (i.e. in close proximity to the storage or use areas of all substances). All loading, unloading, transfer and refuelling operations are to be undertaken in designated areas, with portable bunding and away from any sensitive receptors. Ensure access tracks used for transporting fuel are adequate and safe. All transport of fuel to be carried out during daylight hours. Daily inspections of fuel and chemical storage areas will be undertaken, including containment areas and structures, containers and spill kits. Ensure that all personnel are familiar with this spill response plan and site inductions cover transport, storage, refuelling, response and clean-up activities.	Daily inspections of fuel and chemical storage areas will be undertaken, including containment areas and structures, containers and spill kits	Retained on-site
Spills from chemical transportation (off-site)	Duration of works	Transport spill, partial or total spill due to accident	Off-site along public roads	Chemicals listed	<50 000L for total loss of diesel fuel <1000L for others	Transport companies are to be appropriately licenced to transport chemicals and waste including the requirement to detect and respond to spills (Dangerous Goods and Waste Management and Pollution Control Act)	Monitor the performance of contractors engaged	Chemical transport between Site and Alice Springs and Darwin, Queensland or South Australia

2.3 Potential receptors

A description of the environment, including environmental and cultural sensitivities, with the potential to be impacted by a spill is provided in the EMP. The sensitive receptors relevant to this project include:

- Watercourses
- Water features (i.e. Gilgai)
- Communities
- Homesteads
- Cultural heritage places
- Restricted Works Areas (as identified in AAPA Authority Certificate)

Maps regarding Sacred Sites and restricted work areas are also applicable and will be provided to work crews to ensure awareness of these features.

2.4 Risk assessment

Risks associated with spills have been assessed in the EMP.

2.5 Management measures

Measures to manage spills associated with exploration activities are provided in the EMP and summarised in Table 2-1.

2.6 Safety Data Sheets

Safety Data Sheets (SDS) information should be used in spill response planning and preparation, and reviewed when substances are delivered to site, to identify the type of substance being used and the required equipment necessary to contain a spill of that substance, as well as any PPE requirements in the event of a spill.

It is important to know what you are dealing with, the appropriate training required to deal with the spill, and the necessary equipment to clean up the spill, prior to the event of a spill Health and safety comes first. DO NOT attempt to clean up or contain a spill if you do not have the necessary skills and equipment, or you are putting yourself or others at further risk.

SDS are to be kept in areas used to store or handle hazardous materials. These forms contain the following important information:

- The identity of the chemical product and its ingredients
- The hazards of the chemical i.e. health hazards, physical hazards and environmental hazards
- Physical properties of the chemical (i.e. boiling point, flash point, incompatibilities with chemicals
- Workplace exposure standards for airborne contaminants
- Safe handling and storage procedures for the chemical
- What to do in the case of an emergency or spill
- First aid information
- Transport information
- Personal Protective Equipment (PPE) requirements.

3 SPILL RESPONSE PROCEDURE

Spill response procedures follow the basic priority of (depending on the nature and extent of the spill):

ASSESS > SECURE > CONTROL > ABSORB > DISPOSE > REPORT

3.1 Assess

Assess the spill by determining:

- Type of substance
- Location of the spill
- Source of the spill and whether it can be isolated
- Can the spill be controlled / contained
- What is required to deal with the spill – personal protective equipment etc.

3.1.1 Severity of the spill

The severity of the spill can be assessed using Table 3-1 and Table 3-2.

In terms of volume, Table 3-2 can be used as a guideline for determining severity. It is important to consider Table 3-2 in the context of Table 3-1 when determining severity of a spill.

Table 3-1. Assessing severity ranking of spill

Minor	Reversible and localised impact on the environment. **OR** Environmental impact requires a programmed commitment of time and/or money to remediate, OR would take less than 2 years to recover naturally. **OR** Damage to Company's reputation with a single or small group of organisations or individuals
Moderate	Significant but reversible, OR irreversible and localised, impact on the environment. **OR** Environmental impact requires a programmed commitment of moderate time and/or money to remediate, OR would take 2-10 years to recover naturally. **OR** Local / regional damage to Company's reputation. Negative press coverage at a local or regional scale
Major / severe	Significant AND irreversible impact on the environment. **OR** Environmental impact requires emergency commitment of significant time and/or money to remediate, OR would take more than 10 years to recover naturally. **OR** National / international damage to Company's reputation. Negative press coverage at a national or international scale.

Table 3-2. Volume of spill to determine severity

Minor	>100L to inland waters/land
Moderate	100 – 1500L to inland waters/land
Major / severe	>1500L to inland waters/land

3.2 Secure the spill

If safe to do so, the spill should be immediately secured. Personnel working in or near the area are to be notified of the spill occurrence immediately. Eliminate any ignition sources (e.g. open flames, internal combustion engines etc.). The area is to be secured by means of barricading, signage or danger tape around the spill area to prevent personnel from accessing the area unnecessarily. In the case of a severe or life threatening spill, immediately call emergency services. Any spill identified as 'severe' is to be reported to the authorities as soon as possible (within 24 hours).

3.3 Control the spill

If safe to do so, the source of the spill is to be isolated to prevent the spill from becoming larger and/or entering the receiving environment, particularly waterways/drainage systems. The spill is to be contained by appropriate means which may include using sand bags or earthen bunds to construct a bund wall, use of absorbent material, temporary sealing of cracks or leaks in containers and use of geotextile or silt fencing.

3.4 Absorb the spill

Spills are to be cleaned up by means of absorption. This will convert a liquid spill into a solid and enable more effective clean-up. General purpose and hazardous substance spill kits are available at appropriate locations (i.e. in close proximity to the storage or use areas of all substances). Various absorbent materials will be supplied in the spill kits i.e. absorbent booms or pads, granular absorbents, disposable bags, ties.

Spill response training will be delivered to all personnel, to educate personnel on the appropriate material to use for various spill scenarios. Do not attempt to clean-up a spill unless you have received the relevant training or you are unsure of methods to use. Personal protection equipment MUST be worn.

3.5 Dispose of contaminated materials

The method of disposal will be dependent upon the nature and extent of the spill. Advice should be sought from the relevant authorities to determine the appropriate disposal method for a particular spill. Used absorbent material including granular absorbent, boom and pads shall be put into disposable bags, tied and placed in regulated waste bins. Bags should be clearly labelled. Small quantities of contaminated soils will be disposed of in regulated waste bins or contaminated soil bins if available. On-site disposal of contaminated waste must be co-ordinated and approved by the Site Manager.

3.6 Report the spill

All spills are to be reported to the Blue Energy Site Manager who will notify the Minister as per Part 3, Division 1 of the *Petroleum (Environment) Regulations*. Notification and reporting requirements depend on whether the spill is considered to be a recordable incident or reportable incident (refer to Sections 3.6.1).

Management personnel will review the circumstances of the spill and implement or modify controls to prevent further occurrence of a similar nature. Notifications will include as a minimum;

- Time, date, nature, duration and location of the incident
- Location of the place where incident has occurred
- Nature, the estimated quantity or volume and the concentration of any pollutants involved
- Circumstances in which the incident occurred and cause of the incident, if known
- Action taken or proposed to be taken to deal with the incident
- Failure to complete the required notifications will be considered a system non-conformance.

3.6.1 Reportable incidents

A reportable incident means an incident, arising from a regulated activity that has caused or has the potential to cause material environmental harm or significant environmental harm.

If a reportable incident occurs (or has been identified/detected), the Minister will be informed in accordance with *Part 3, Division 1 (33) Notice of a reportable incident*. This requires the Minister to be informed orally or in writing as soon as practicable, but no later than 2 hours after the incident first occurred, or when the interest holder became aware of the incident. If notice of the reportable incident is given orally, a written notice about the incident (specifying all the matters) will be provided within 24 hours after giving oral notice.

Reporting on the incident will be conducted in accordance with *Part 3, Division 1 (34) Report about a reportable incident*. An initial report will be prepared and provided to the Minister within 3 days after the reportable incident first occurred (or was identified). Details in the reports will be in accordance with the Regulations. A final report will be provided to the Minister within 30 days after corrective actions have been completed. Details in the reports will be in accordance with the Regulations. Prior to the submission of the final report, interim reports will also be provided to the Minister in accordance with the Regulations to keep the Minister up to date with contamination status and remediation plans associated with the incident.

3.6.2 Recordable incidents

A recordable incident means an incident arising from a regulated activity:

- Has resulted in an environmental impact or environmental risk not specified in the current plan for the activity; or
- Has resulted in a contravention of an environmental performance standard specified in the current plan for the activity;
- Is inconsistent with an environmental outcome specified in the current plan for the activity.

If a recordable incident occurs (or has been identified), the Minister will be informed in accordance with *Part 3, Division 1 (35) Report about recordable incident*. Reporting of recordable incidents will occur as part of quarterly compliance reporting for the approved EMP. Reporting details will be in accordance with the Regulations.

4 RESPONSIBILITIES

It is the responsibility of all Blue Energy employees and contractors on site who witness a spill to report it to the Blue Energy Site Manager, who will report the spill to the Minister, as per the reporting requirements detailed in Section 3.6.

APPENDIX L EMERGENCY RESPONSE PLAN

Environmental Management Plan

Wiso Basin Seismic Survey EP200, 205 & 207

Emergency Response Plan

Wiso Basin Seismic Survey on EP 205 & 207

Blue Energy

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1 INTRODUCTION

1.1 Context

Blue Energy is a rapidly evolving oil and gas exploration company strategically positioned with abundant conventional and unconventional assets throughout Queensland and the Northern Territory to meet the rising demand for cleaner energy.

Blue Energy propose to complete a two dimensional (2D) seismic survey within exploration permits (EP) 205 and 207, which is located approximately 465 km south-west of Katherine, Northern Territory. The Project will involve two seismic lines (total length 294 km) and three temporary exploration camps. The proposed seismic lines will be used to access works areas and camp sites (shown on Figure 1-1). These works will be regulated through an Environmental Management Plan (EMP) approved by the Department of Environment, Parks and Water Security (DEPWS).

This document describes the Emergency Response Plan (ERP) for the Project.

1.2 Purpose and scope

This ERP describes the processes to be followed by Blue Energy in the event of an emergency during the exploration program activities on EP 205 and 207.

The purpose of the ERP is to provide clear, precise and effective guidelines for personnel responsible for the management of emergency events and to ensure that those persons are kept well informed and capable of performing these and other necessary duties. This plan provides an organisational and procedural framework for the management of emergency events on EP 205 and 207.

This ERP will be used in conjunction with site specific Bushfire Management Plans and Spill Response Plans as well as the EMP. This ERP applies to all Blue Energy employees, contractors and visitors on EP 205 and 207 during the exploration program activities.

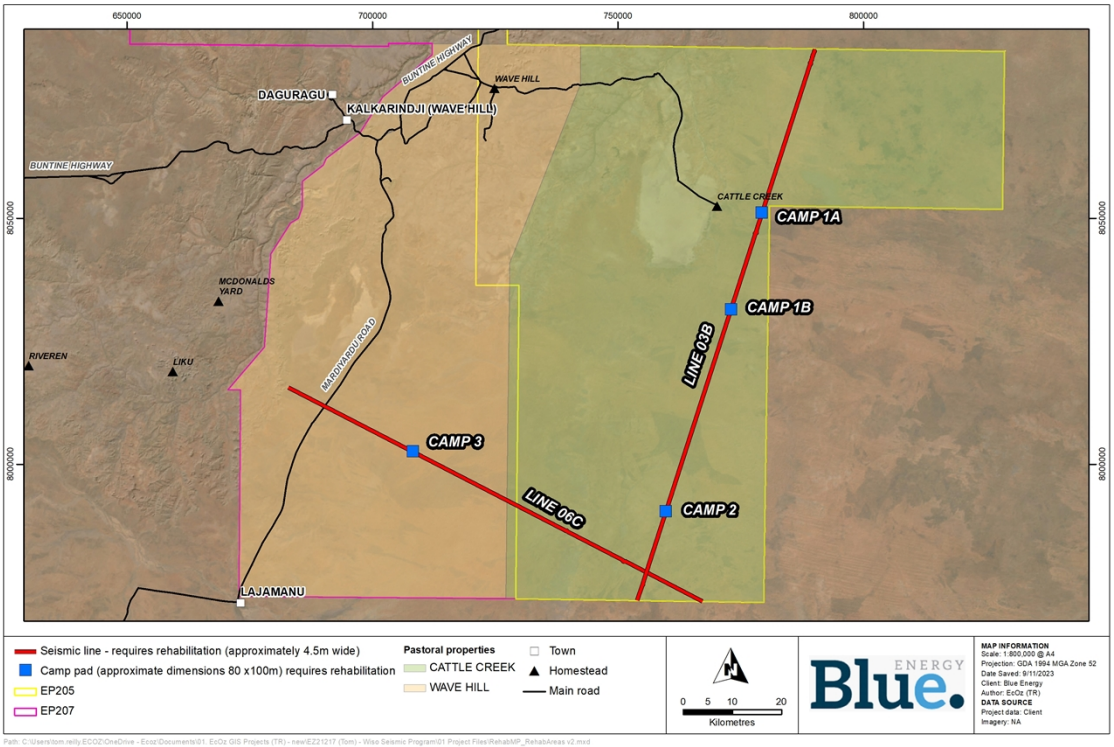

Figure 1-1. Map of Project activities

2 DEFENITION OF A SITE EMERGENCY

An emergency is defined as an unplanned event within a specific site, facility, field or area, accidentally or deliberately caused, which requires a response to normalise the activity and which may result in an incident such as:

- Death, injury or near miss to people
- Environmental harm or damage
- Uncontrolled release of substance to air, land or water
- Loss or damage to physical assets
- Loss of reputation
- Loss of business
- Loss of control of any health, safety environment or community related incident

3 ROLES AND RESPONSIBILITIES

Specific Individual responsibilities are outlined below in Table 3-1; however, general management responsibilities with respect to this manual are as follows:

- It is the responsibility of the Blue Energy Site Manager to ensure that personnel and contractors within the project area are familiar with the location of this manual and all on-site copies. In order for this to be achieved the site manager /Supervisor needs to be informed of all staff and contractor movements within the area.
- Blue Energy Site Manager must also ensure that personnel and contractors within the exploration area are familiar with the relevant action plans outlined in this ERP.
- It is the responsibility of all staff and contractors to inform the Site Manager or Exploration Manager of any new hazard that could result in a potential emergency situation that is not adequately covered in this plan.

The emergency management team will consist of:

- Emergency Response Coordinator (Site Manager)
- Incident Controller (delegate of the Site Manager)
- Other onsite staff and contractors

Table 3-1. Roles and Responsibilities

Title	Position Summary	During incident	Post incident
Emergency Response Coordinator (Site Manager)	The Emergency Response Coordinator is the site manager or the delegate in charge, of handling and controlling any emergency situation that may occur in and around the project area. On site responsibilities may be delegated, however, the Emergency Response Coordinator must ensure that the person delegated these responsibilities understands and is capable of performing them.	• Initiating response by Blue Energy personnel • Controlling and co-ordinating the emergency response effort • Nominating personnel to assist with Emergency Control activities (Incident Controller, • Communications/Information officer, Logistics, Muster point controllers) • Monitoring team members for sign of distress or fatigue and to replace affected members accordingly • Acquiring and allocating both internal and external resources • Controlling the movement of personnel, equipment and resources to and from the emergency location • Standing down personnel and equipment as necessary • Determining whether the emergency constitutes a crisis • Notifying the Managing Director, or the Directors delegate, in the event of a crisis • Notifying external emergency services and co-ordinating their response • Providing regular status reports downwards to the Incident Controller and upwards to Managing Director if required • Making continuous notes on the events and communications during emergency and maintaining an accurate log of events (document all activities and communications) • Preparation for media inquiries (Media response will be via the Managing Director) • Declaring emergency situation and response over	• Inspecting incident site • Obtaining statements from witnesses to the incident • Informing next of kin, as required • Organising crisis counselling, if required • Nominating a person as spokesperson for media • Facilitating debrief once the emergency has concluded • Nominating persons for salvage and clean-up activities • Nominating persons for investigation team • Organising counsellors if needed • Providing information to work groups on the emergency situation and investigation outcomes • Identifying improvement areas in emergency response if evident and initiate appropriate • corrective action

Title	Position Summary	During incident	Post incident
Incident Controller (delegate of the Site Manager)	The Incident Controller will travel to the emergency site, ensuring that they remain contactable during any required travel. Other staff and contractors may be called upon to perform activities and should remain contactable and ready to assist when requested. Responsibilities may be delegated; however, the Incident Controller must ensure that the person delegated these responsibilities understands and is capable of performing them.	• Establishing a Forward Control Centre • Acting as the Incident Controller • Providing regular status reports to the Emergency Response Coordinator • Advising the Emergency Response Coordinator of resources required • Making continuous notes on the events and communications during emergency and maintaining an accurate log of events (document all activities and communications) • Ensuring that all personnel within the area have been accounted for • Liaising closely with the Emergency Response Coordinator and any Third-party emergency services at the scene • Ensuring incident scene is barricaded off and access is restricted to emergency personnel only • Acting as the central communication point at the emergency scene and maintain open lines of communication with the Emergency Response Coordinator and Third-Party emergency services at the scene • Providing technical advice to the Emergency Response Coordinator and Third-Party emergency services • Monitoring team members for sign of distress or fatigue, replace accordingly • Maintaining register of personnel who leave the site who may need to be contacted • Communicating to the Emergency Response Coordinator when emergency is over	• Preventing personnel from removing equipment or items from the scene of the incident and disturbing the scene • Posting a sentry at the scene to ensure area is not interfered with • Assisting the investigation team as necessary • Participating in debrief • Prepare documentation and records of equipment loss or damage

Title	Position Summary	During incident	Post incident
Other onsite staff and contractors	If requested by the Emergency Response Coordinator or the Incident Controller, the relevant personnel should locate to the site of the emergency and assist.	• Providing technical information to the Emergency Response Co-ordinator • Assisting with roll calls • Communicating all information back to the to the Emergency Response Co-ordinator on developments as they occur • Providing any other resources that are within their capabilities • Remaining at the site and awaiting instructions • Assisting with the Incident Controller if requested	• Providing resources for salvage and clean up • Participating in debrief • Assisting with the identification of personnel who may need counselling

4 RESPONSE SCENARIOS

To ensure that Blue Energy are capable to respond to and prepare for Emergency situations, it is important that each project site undertake a site-based risk assessment. This risk assessment will identify potential emergency events which will in turn, support the site emergency management requirements.

Table 4-1 below describes some emergency response scenarios and recommended response actions/procedures.

Table 4-1. Emergency response scenarios

Category	Response actions / procedures

General emergency	• Remove yourself and others from danger
	• Raise the alarm – Notify Site Manager / Supervisor
	• Stop all work and make sure the area is safe
	• Activate emergency shutdown devices/isolate equipment as necessary if safe to do so
	• Provide First Aid to any injured persons (DRSABCD)
	• Account for people
	• Call emergency services if required
	• Follow the directions of emergency services or response personnel and assist as required if you feel safe and capable to do so
	• Notify appropriate Blue Energy contacts
	• Determine the recovery strategy and resources required:
	  ○ Check for equipment integrity,
	  ○ Ensure all protection systems are restored,
	  ○ Replenish, replace or return emergency equipment

Bushfire	• If in a life-threatening situation and it is safe to do so, cease activities, shut down plant, and flee the area.

Category	Response actions / procedures
	• Raise the alarm – Notify Site Manager / Supervisor • If the fire is in the distance or in close proximity, contact Bushfire NT to report the fire unless the Site Manager / Supervisor has already been advised of the fire • Account for people • Be on the alert for spot-fires • Evacuate if and when advised. • Return to the Site only when cleared by the emergency services. • Coordinate the clean-up and begin site remediation if needed
Snakebite	• Check the immediate area for danger to yourself or the injured person • Calm the person and keep them still • Notify Site Manager / Supervisor • Call for medical assistance • Do not wash or suck the bite or use a tourniquet • If bitten on a limb, apply a pressure bandage, or cloth approximately 10-15cm wide upwards form the fingers or toes, firm but not too tight • Keep the limb still by using a splint • If able to do so mark the area of the bandage where you think the bite occurred – this will assist medical staff • Leave the splint or bandage on until reaching the hospital • Follow Blue Energy Incident Reporting and Investigation Procedure
Vehicle accident	• Check the immediate area for danger to yourself or the injured person • If the vehicle is in contact with power lines, stay clear and advise occupants to stay in the vehicle • Raise the alarm – Notify Site Manager / Supervisor (report location, type and extent of incident) • Request assistance of Emergency Services as required • Switch off vehicle ignition • Assess vehicle and site damage; take relevant actions to secure the accident scene • Do not try to remove casualties from the vehicle until you can be sure other dangers are not present • When possible, remove trapped/injured personnel, provide medical aid (as qualified)
Spill response	• Notify Site Manager / Supervisor • Implement Spill Response Plan • All necessary action should be taken to minimise the size and any adverse effects of the release • If adequate resources are not available to contain the release and if it threatens public health, property or the environment, the state fire brigades should be contacted for emergency assistance - phone 000 • Always pay attention to fire and health hazards • Activate containment operations immediately to prevent the spill from reaching a surface

Category	Response actions / procedures
	watercourse or groundwater • Clean up spill
Missing persons	• Notify Site Manager / Supervisor • After being notified of a missing or overdue person, • Obtain information on time and location of the last sighting • Attempt to establish communication with the missing person via mobile phone and SMS contact and if possible, UHF, VHF, Satellite phone • If possible, contact the destination point, e.g. hotel/motel/camp to determine if the person has arrived • If possible and safe to do so (i.e. weather conditions) dispatch other nearby employees to look for the missing person • After a period of time without contact (as determined collaboratively by the Site Supervisor / Site Manager) notify the police of the missing person
Weather (flood/cyclone)	• Initiate Medical Emergency Response if required • Account for all personnel • Take shelter as necessary • Notify Site Manager / Supervisor • Monitor weather alerts and radio stations • Never cross a flooded creek, road or causeway

5 RESPONSE COMMUNICATION

The management of information flow and communications is vital to effective emergency response. The emergency response communication and reporting relationships for the sites are illustrated in Figure 5-1.

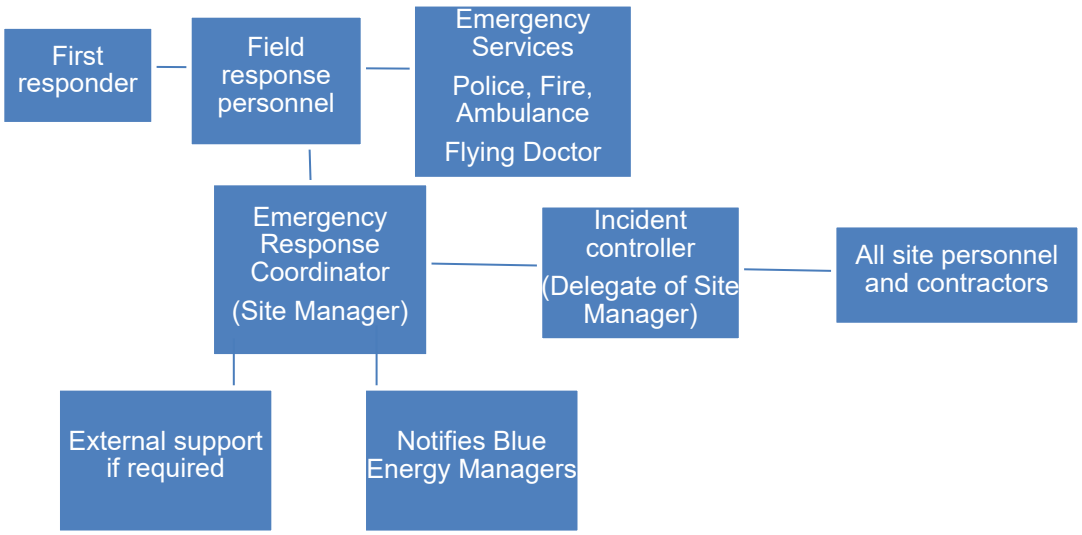

Figure 5-1. Communication flowchart

The primary method of voice communication during emergencies will be via radios (in each site vehicle) or satellite phones where available.

5.1 Regulatory notification

A regulatory notifiable incident is an incident or non-compliance with an External Mandatory Obligation or External Voluntary Obligation that requires notification or reporting to a Regulator as prescribed by applicable Laws and Regulations. HSE regulatory notifiable incidents required to be reported to a regulator are listed in Appendix A.

5.2 Stakeholder communication

The Site Manager may be required to liaise with relevant stakeholders (such as land occupiers/owners, neighbours, local regulatory authorities etc) that could potentially be impacted by the incident/emergency situation. Initial information to be provided should include state/type of the emergency, possible cause, effects/consequences, likely duration, and potential impacts.

5.3 Media enquiries

During an emergency event, media attention may occur at the affected site. If personnel receive an enquiry from a journalist or reporter, whether in person or by phone and are asked about Blue Energy, they should say:

“I am not in a position to comment but if you give me your name and phone number I will organise for the most appropriate person to call you.”

Always ask for:

- the journalist / reporter's name;
- publication / media outlet;
- contact phone number and / or email, and
- publication deadline.

Report the enquiry to the Site Manager, who will advise the Blue Energy Project Manager on call at the earliest opportunity. It is important to remember that there is no such thing as "off the record". Even if you are speaking informally, you could be quoted at any time.

6 INCIDENT NOTIFICATION

All personnel will be required to report all incidents or near-misses to the Site Manager. The Site Manager is responsible for ensuring that all reported incidents and near-misses are promptly reported to Blue Energy Project Manager and are investigated and that appropriate corrective actions have been completed.

Appendix A details the Incident Notification information. An example of the information required to be gathered during an incident includes;

- Name of the person calling in the incident and receiver name
- Names of the personnel involved in the incident, if not known, the number of people involved in incident
- Coordinates or landmarks of incident
- Clear directions on how to get to the incident site
- Incident type and description i.e. Injury, explosion, vehicle accident, fire, missing personnel
- Description of the incident including; time incident occurred, cause of incident if known, any actions taken on-site and emergency required
- Details on the incident size including area, height, volume, description of injury, number of people involved, preliminary assessment of medical assistance required
- Status of the incident, i.e., has the incident or potential of the incident to cause more damage or injury stopped, level of emergency response required, first aid applied to date and level of controls in place, environmental situation (wind, rain, etc.).

7 EMERGENCY RESPONSE EQUIPMENT AND PERSONNEL

All emergency response equipment, such as first aid kids, fire extinguishers, PPE and spill kits will be kept in strategic places around the Site. Equipment will be inspected on a scheduled basis.

The equipment and resources required for an emergency will be dependent on the circumstances of the situation. Equipment and plant available at the Sites is limited to light vehicles (4wd utilities and wagons) and those vehicles and plant brought on site by contractors to fulfil exploration-related contracts.

All personnel will complete an induction on arrival at the Site. The induction will identify emergency response actions and muster point locations. A Personnel On-Site Register is maintained at Site, recording each person's name, company and whether they are on Site or off Site. In the event of an emergency or incident, the Site Manager or Site Supervisor is responsible for accounting for every person on site.

The Site Manager shall ensure that emergency access and egress are established and maintained at the Site.

The Site Manager shall ensure that the muster points at the Site are identified to all personnel during their induction.

All primary muster points are clearly signposted with secondary muster points available. All muster points can be reached unimpeded during an emergency.

In all instances, personnel shall become familiar with the safest route from their work area to the designated assembly areas.

All persons shall remain at the designated muster point until further instructions or the "all-clear" is given.

8 EXTERNAL EMERGENCY SUPPORT

In an emergency situation the Emergency Response Coordinator or delegate, will be responsible for:

- contacting the appropriate local emergency service agencies to initiate external response;
- delegating responsibilities and authorities to help the emergency services once they have arrived on site, as appropriate; and
- providing local emergency services with specialist advice regarding plant/equipment operating requirements and hazards.

The Site Manager will ensure the Emergency services have a precise location for the Site at which the incident has occurred, including coordinates and a guide map. The Site Manager will stay up-to-date with local Emergency services and community authorities on their:

- Availability
- Capabilities
- Distances and modes of transport
- Communication requirements
- Vested interest in any onsite Incident.

The Site Manager will also provide relevant information to the local Emergency service relating to:

- The standard of medical care available on site
- Hazardous substances list
- Safety Data Sheets

9 RECOVERY ACTIONS

The Site Manager will declare the emergency ended when the Site has been returned to a safe condition, all personnel have been accounted for and injured personnel have been stabilised and /or evacuated.

On standing down from an emergency, the Site Manager is to:

- Review the emergency response and identify any areas for improvement
- Identify any necessary improvements for this plan and related procedures
- Secure incident site and do not disturb area until the investigation has been completed
- Organise for a full incident investigation and analysis
- Collect any evidence that may assist in the investigation (e.g., testimonies, records of actions taken, photographs, etc.)
- Compile and file away all documents relating to the response
- Check equipment and infrastructure to see what, if any impact has occurred
- Replenish, replace, or return emergency equipment
- debriefing all personnel (including people currently relieved or stood down)
- Ensure personnel impacted by the incident receive the required counselling, or information to continue with safe operations
- Assess for potential decontamination needs
- Repair or replace damaged equipment and test for safe functionality
- Attend to commissioning and site reinstatement
- Revise ERP and implement changes or training as required

10 TRAINING

The Site Manager shall ensure that all personnel are trained in the use and functions of this ERP. Training will be provided in various forms including; practical drills, desktop exercises, simulated exercises, competency-based training, toolbox meetings and resource and equipment checks. The simulated exercises shall be specific emergency scenarios addressing identified risks specific to the exploration programs activities.

11 EMERGENCY CONTACT DETAILS

Blue Energy

Name	Title	Contact information
Mr John Phillips	Managing Director	+61 402 322 730
Mr William Ma	Project Manager	+61 405 353 383

Seismic Contractors

Name	Title	Contact information
Mr Leeton McHugh	Manager (Terrex Seismic)	+61 422 232 319

Government and Stakeholders

Name	Contact information
Department of Environment, Parks and Water Security (DEPWS) General Environmental enquiries Executive and Business Services	 08 8924 4218 08 8999 5511
Department of Industry, Tourism and Trade (DITT) Petroleum Operations	08 8999 6030 After hours: 1300 935 250
Pollution hotline	1800 064 567
Onshore gas non-compliance	1800 413 889
NT WorkSafe	1800 019 115
Northern Land Council (NLC) Katherine	(08) 8971 9899
Cattle Creek	[redacted]
Wave Hill	[redacted]

Other

Name	Contact information
Police	000 Or 131 444 for non emergency situations

Name	Contact information
Wave Hill Police Station (non-emergency)	08 8975 0790
Katherine Hospital	08 8973 9211
Darwin Hospital	08 8922 8888
Royal Flying Doctors Service HF Radio Satellite Telephone Alice Springs base Darwin base	For 24 hour medical and emergency help in central NT call 1800 1MRACC (1800 167 222) 4010kHz, 6890kHz or 8165kHz 08 8648 9555 8958 8600 8998 9940
Bushfires NT Katherine, Gulf and Victoria River District (VRD)	08 8973 8871 or 08 8973 8872 VRD phone:08 8973 8870 (business hrs only, 000 if out of hrs)

12 REVIEW

The Site Manager is responsible for ensuring the suitability and maintenance of this document. The Project Manager is responsible for any changes to this ERP.

The ERP will be reviewed / revised when there is a significant change in the operations that are covered by this ERP. If applicable, the ERP will be modified as a result of changes to the emergency response process, otherwise the ERP will be reviewed annually.

APPENDIX A INCIDENT NOTIFICATION GUIDELINES

INCIDENT NOTIFICATION GUIDELINES	
Description	**Contact details**
NT Worksafe	
• Death • Serious injury or illness ○ Immediate treatment as an in-patient in a hospital ○ Immediate treatment for the amputation of any part of the body ○ Immediate treatment for a serious head injury ○ Immediate treatment for a serious eye injury ○ Immediate treatment for a serious burn ○ Immediate treatment for the separation of skin from an underlying tissue (such as de-gloving or scalping) ○ Immediate treatment for a spinal injury ○ Immediate treatment for the loss of a bodily function ○ Immediate treatment for serious lacerations ○ Medical treatment within 48 hours of exposure to a substance • Dangerous incidents ○ An uncontrolled escape, spillage or leakage of a substance ○ An uncontrolled implosion, explosion or fire ○ An uncontrolled escape of gas or steam ○ An uncontrolled escape of a pressurised substance ○ Electric shock: examples of electrical shock that **are not** notifiable: ▪ shock due to static electricity ▪ 'extra low voltage' shock (i.e. arising from electrical equipment less than or equal to 50V AC and less than or equal to 120V DC) ▪ defibrillators are used deliberately to shock a person for first aid or medical reasons examples of electrical shocks that **are**	The Site Manager will notify NT WorkSafe immediately after becoming aware of a 'notifiable incident' 1800 019 115 or ntworksafe@nt.gov.au An incident site must not be disturbed, other than the immediate response to assist injured people, recover a body or make the area safe, until an inspector arrives at the site or directs otherwise (whichever is earlier)

INCIDENT NOTIFICATION GUIDELINES	
Description	**Contact details**
notifiable ▪ minor shock resulting from direct contact with exposed live electrical parts (other than 'extra low voltage') including shock from capacitive discharge • The fall or release from a height of any plant, substance or thing • The collapse, overturning, failure or malfunction of, or damage to, any plant that is required to be design or item registered under the Work Health and Safety Regulations, for example a collapsing crane • The collapse or partial collapse of a structure • The collapse or failure of an excavation or of any shoring supporting and excavation	
DITT	
• An incident involving death or serious injury (reports shall be in addition to, and not take precedence over reports required by NT WorkSafe). A serious injury is one which requires immediate attention by a medical practitioner • An incident involving serious damage (other than Environmental Harm) including loss, destruction or damage to property exceeding $50k or when any person dies or suffers serious injury • An incident involving or could potentially involve the injury to a person or serious damage to property that is professionally considered to have been caused by an event that is not in the normal or ordinary course of an operation (Potentially Hazardous event) • An incident where damage to property occurs that is not serious damage to property, but which results in a significant loss of structural integrity or load bearing capacity in the property damaged or results in some other significant unsafe condition • An incident that is considered to be an emergency	The Site Manager will notify DITT immediately after becoming aware of a 'notifiable incident' 08 8999 6030 After hours: 1300 935 250
Applicable to ON TENURE SPILLS (note Off tenure spills under Waste Management and Pollution Control Act 1998) Reportable Incident: An incident, arising from a regulated activity, that has caused or has the potential to cause material environmental harm or serious environmental harm.	The Site Manager will notify DITT: • As soon as practicable (not later than 2 hours after the incident) • <24 hours after oral notice (written notification) • 3 days after the incident (initial report) • 90 days intervals from the date of the initial report (interim reports) • 30 days after clean up or rehabilitation (final report)

INCIDENT NOTIFICATION GUIDELINES	
Description	**Contact details**
Material environmental harm means, harm that: a) Is not trivial or negligible in nature; b) Consists of an environmental nuisance of a high impact or on a wide scale; c) Results, or is likely to result, in not more than $50k or the prescribed amount (whichever is greater) being spent in taking appropriate action to prevent or minimise the environmental harm or rehabilitate the environment; or d) Results in actual or potential loss or damage to the value of not more than $50k or the prescribed amount (whichever is greater).	08 8999 6030 After hours: 1300 935 250
Recordable Incident: An incident that has resulted in an environmental impact or environmental risk not specified in the current plant for the activity; or has resulted in the contravention of an environmental performance standard specified in the current plan for the activity; or is inconsistent with an environmental outcome specified in the current plan for the activity; and is not a reportable incident.	The Site Manager will notify DITT 15 days after each 90 day period after then day on which the environmental management plan is approved. 08 8999 6030 After hours: 1300 935 250
• A reportable incident that involves: ○ Death or serious injury (or the potential to cause) ○ Significant damage to a pipeline (or potential to cause) ○ Immediate investigation • A significant pipeline accident event that: ○ Is connected with work carried out on or in relation to a pipeline ○ Causes, or has the potential to cause human death	The Site Manager will notify DITT as soon as practicable 08 8999 6030 After hours: 1300 935 250
DEPWS	
• An incident arising from a regulated activity that has caused, or has the potential to cause, material environmental harm, or serious environmental harm as defined under cl.117AAB(1) the Petroleum Act	The Site Manager will notify DEPWS as soon as practicable, but no later than 2 hours after the first occurrence of the incident or after the time Blue Energy becomes aware of the incident Pollution hotline: 1800 064 567 Onshore gas non-compliance: 1800 413 889
Duty to notify of incidents causing or threatening to cause pollution. Applicable to off tenure related spills (note ON tenure	The Site Manager will notify DEPWS as soon as practicable after (and in any case within 24 hours after) first becoming aware of the incident

INCIDENT NOTIFICATION GUIDELINES	
Description	**Contact details**
spills under Petroleum (Environment) Regulations): 1) Where: a) an incident occurs in the conduct of an activity; and b) the incident causes, or is threatening or may threaten to cause, pollution resulting in material environmental harm or serious environmental harm, the person conducting the activity must notify the NT EPA in accordance with subsection (3) as soon as practicable after (and in any case within 24 hours after) first becoming aware of the incident or the time he or she ought reasonably be expected to have become aware of the incident." An incident that causes, or is threatening or may threaten to cause, pollution resulting in material environmental harm or serious environmental harm. Refer to the definition of material and serious environmental harm provided in DITT section above. Pollution means: a) A contaminant or waste that is emitted, discharged, deposited or disturbed or that escapes, or b) A contaminant, effect or phenomenon, that is present in the environment as a consequence of an emission, discharge, deposition, escape or disturbance of a contaminant or waste. This does not apply to incidents confined within petroleum activities land (including air and water above or below) – see the EMP for the area of petroleum activities land	Pollution hotline: 1800 064 567 Onshore gas non-compliance: 1800 413 889
Unable to control a fire on the land	The Site Manager will notify DEPWS (Bushfires NT) and applicable land holders, following the fact. See above Emergency Contact details tables for phone numbers as it is dependent on location of fire.
DAWE	
Incidents considered to have an impact to Matters of National Environmental Significance	The Site Manager will notify DAWE within 5 business days of becoming aware of the breach Department of Agriculture, Water and the

INCIDENT NOTIFICATION GUIDELINES	
Description	**Contact details**
	Environment (02) 6274 1372 or 1800 110 395 environment.compliance@awe.gov.au
NT EPA	
Alteration of action in such a manner that the environmental significance of the proposed action may be changed	The Site Manager will notify NT EPA as soon as practicable 8924 4218 ntepa@nt.gov.au
NT Heritage Council	
Discovery of archaeological places and objects	The Site Manager will notify NT Heritage Council as soon as practicable (within 7 days of discovery) 8999 5039 heritage.branch@nt.gov.au
NT Weed Management Branch	
Identifying a declared weed that has not previously been, or known to have been, present on the land.	The Site Manager will notify NT Weed Management Branch within 14 days of becoming aware Darwin: 08 8999 4567 Katherine: 08 8973 8857 Tennant Creek: 08 8962 4322 Alice Springs: 08 8951 9210 weedinfo@nt.gov.au

APPENDIX M REHABILITATION PLAN

Environmental Management Plan

Wiso Basin Seismic Survey EP200, 205 & 207

Rehabilitation Plan

Wiso Basin Seismic Survey on EP 205 & 207

Blue Energy

DOCUMENT CONTROL RECORD

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3	T. Reilly (EcOz)	R. Hall (EcOz)	J. Phillips (Blue Energy)	7 Nov 2023

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1 INTRODUCTION

1.1 Context

Blue Energy is a rapidly evolving oil and gas exploration company strategically positioned with abundant conventional and unconventional assets throughout Queensland and the Northern Territory to meet the rising demand for cleaner energy.

Blue Energy propose to complete a two dimensional (2D) seismic survey within exploration permits (EP) 205 and 207, which is located approximately 465 km south-west of Katherine, Northern Territory. Proposed Project activities are shown on Figure 1-1.

The Project comprises of two seismic lines (03B and 06C) which will provide a total data acquisition length of approximately 214 km. The two seismic lines (03B and 06C) will require line preparation works.

Three temporary exploration camps are required (however four options have been selected for planning purposes). Camp locations have been strategically positioned to minimise the number of camps required for the seismic survey (i.e. centrally positioned), to minimise vegetation clearing (i.e. positioned within existing cleared / disturbed areas), to avoid significant habitat areas or threatened species, and to avoid impacts to cultural heritage values (as identified by AAPA and Archaeological Assessment). Camp sites will require a pad to be cleared (dimensions will be approximately 80 x 100 m) (camp sites 1a, 1b, 2, 3).

The program will utilise proposed seismic lines for access to works areas and camp sites.

These works will be regulated through an Environmental Management Plan (EMP) approved by the Department of Environment, Parks and Water Security (DEPWS).

This document describes the Rehabilitation Plan for the Project.

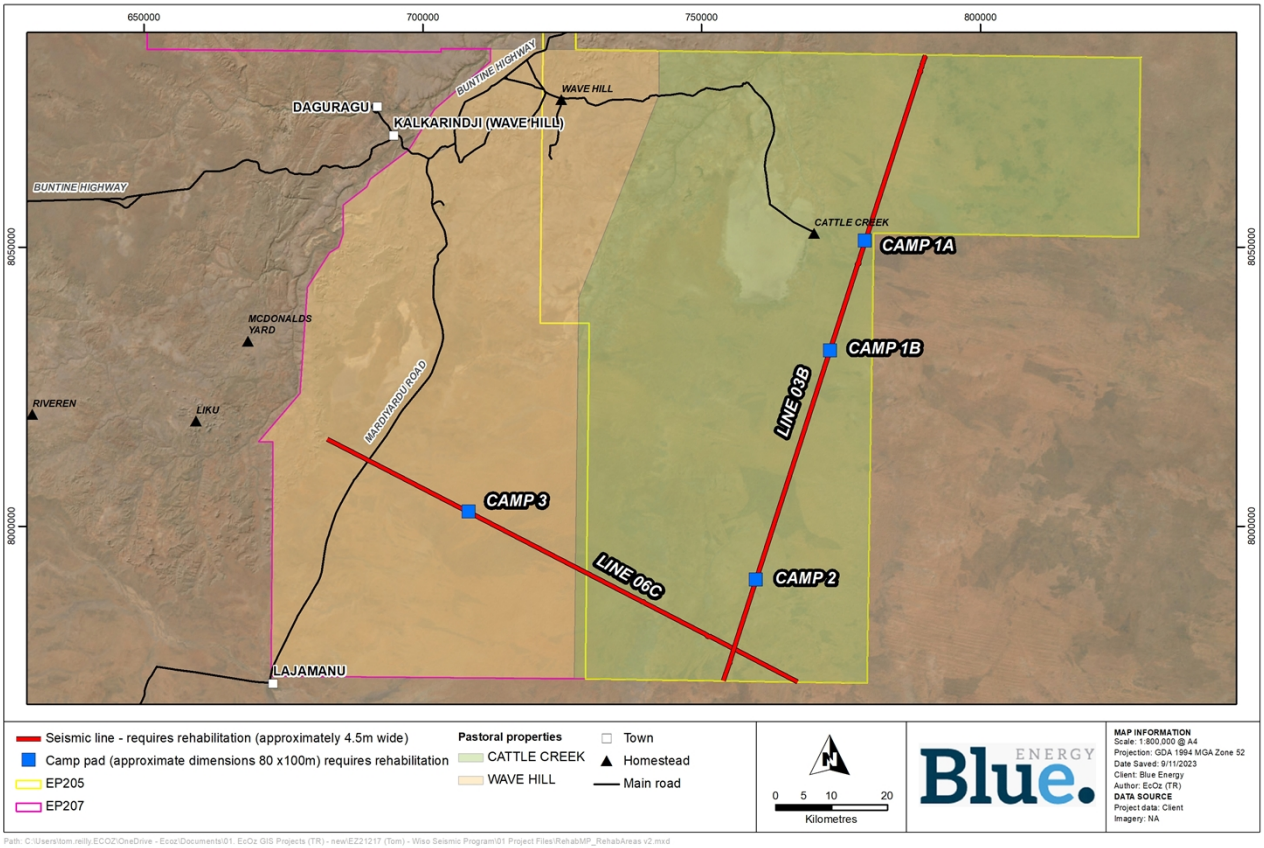


Figure 1-1. Map of Project activities

1.2 Purpose and scope

Rehabilitation is the process of returning disturbed land to a stable, self-sustaining landform that is similar to pre-existing and adjacent vegetation communities and/or landforms. Success of rehabilitation is a critical component of this project, and failure of rehabilitation is considered as a major risk.

This Rehabilitation Plan has been developed in accordance with *Code of Practice: Onshore Petroleum Activities in the Northern Territory* clause A.3.9 Rehabilitation. This report details rehabilitation strategy, methods, monitoring procedures and define rehabilitation success criteria.

2 REHABILITATION STRATEGY

2.1 Rehabilitation objectives

All disturbed land that is not required for ongoing or future petroleum works will be rehabilitated to as close as possible to its pre-disturbed condition, consistent with surrounding land uses and ecological values as compared to analogue sites.

Blue Energy will ensure that rehabilitation is:

- Stable and self-sustaining.
- Safe for the land users and wildlife.
- Returned to an agreed and close-to pre-disturbance level that requires little or no ongoing management.
- Complementary to the adjoining landscape.
- Re-instated to reflect the natural ecosystem/s, or establish an alternative outcome that is commiserate with the surrounding land use e.g. pastoralism, cropping, etc.
- There are no impacts of AAPA Restricted Works Area that occur adjacent to works area.

2.2 Rehabilitation strategy

The proposed rehabilitation approach is assisted natural regeneration in areas that have been cleared, and natural regeneration for the seismic line areas. Wherever practicable, vegetation will not be cleared, and vehicles will traverse over or around the vegetation instead. This approach is most suitable for open lightly wooded areas and grasslands and will result in minimal ground disturbance and rehabilitation efforts.

Rehabilitation of the seismic lines will be carried out in a progressive manner, following behind with the completion of each survey line. This will ensure that land is stabilised as soon as possible after disturbance to reduce the occurrence of erosion, sedimentation, loss of topsoil and weed invasion.

Rehabilitation will be completed no later than 12 months following cessation of the regulated activity at each location cleared of vegetation (unless area is planned to be used for future petroleum exploration activities).

Methods for final rehabilitation are discussed in more detail in Section 3.

2.3 Outcomes

Prior to commencement of activities, consultation will be undertaken with landholders to assist in determination of an agreed rehabilitation outcome. To date, high level discussions have been conducted with landholders where land clearing is proposed (line 03B and 06C), any specific measures will be discussion once EMP approvals are in place. At this stage, it is the wish of the land holder that lines are rehabilitated rather than kept for access tracks for pastoral operations. It is expected that consultations will be an ongoing process throughout the rehabilitation phase of the exploration program.

Rehabilitation requirements and objectives will be determined on a case-by-case basis, but will be compatible with the safety, landform, vegetation cover and soil stability of the surrounding area and methods developed in this plan.

3 REHABILITATION METHODS

3.1 Vegetation clearing

Cleared vegetation is to be pushed to one side of the 2D seismic lines, to assist in future rehabilitation works. Cleared vegetation may also be used in erosion and sediment control structures. Retention of green waste can assist in creation of micro-habitats for seed germination, promote retention of soil moisture, and provide habitat for fauna.

In areas of weed occurrence, cleared vegetation will be flagged so that it is not used in rehabilitation works. Vegetation clearing is to avoid removal of large trees (>50 cm DBH) where possible.

3.2 Natural regeneration

Where clearing is required, cleared vegetation and topsoil will be stockpiled to be re-spread following the works. The topsoil will contain a natural seedbank. If topsoil stockpiles are created, they will not be covered due to the short-term nature of this activity (i.e. the likelihood of erosion and loss of nutrients is expected to be low -especially in sandplain soil types where works are located). Spreading of waste vegetative matter over disturbed areas provides micro-habitats and slows run-off during rainfall events, thus enhancing infiltration. This is proposed to be implemented progressively at the end of the 2D seismic exploration activities for each line.

3.3 Assisted natural regeneration

Assisted natural regeneration combines natural regeneration with soil preparation and weed control. If monitoring demonstrates that natural regeneration is unsuccessful, additional soil preparation combined with reseeding using local provenance seed shall be carried out.

3.4 2D seismic lines

Seismic lines that were subject to land/vegetation clearing (lines 03B and 06C) will be restored so that soil surface is returned to blend in with surrounding landform (in terms of slope). This will involve removal of any windrows created during line preparation activities (it is noted that windrow creation will be minimised where possible). If required, soil surface will be lightly scarified and ripped; and vegetation re-spread to stabilise soils and promote regeneration.

3.5 Accommodation camps

Camp pads subject to land/vegetation clearing will be restored so that soil surface is returned to blend in with surrounding landform (in terms of slope). Stockpiled vegetation and topsoil will be re-spread across the surface followed by light scarification and ripping (rip lines are to be spaced such that movement of soil is limited). Topsoil stockpiles will not be covered due to the short-term nature of this activity (i.e. the likelihood of erosion and loss of nutrients will be low, especially in sandplain soil types where works are located).

3.6 Access tracks

No access tracks are required for this program, seismic lines will be used for access to works areas and camp sites.

3.7 Erosion and sediment control

The following erosion and sediment control measures can be used to protect rehabilitated areas. Further information is available in the project Erosion and Sediment Control Plan.

- Rehabilitation will be undertaken in a progressive manner to limit erosion risk.
- Inspections, following heavy rainfall, of areas prone to concentration of surface water flows.
- Erosion and sediment control structures are to be installed prior to land disturbance, and maintained in place until after rehabilitation is complete.
- All erosion and sediment control devices are to be constructed with consideration of the IECA Best Practice Erosion and Sediment Control Guidelines 2008.
- Construct, improve or repair drainage control measures to reduce water movement.

3.8 Weed management

Vehicles moving to and from the rehabilitation area/s are to be free from weed seed. Weed hygiene is to be carried out prior to access into areas undergoing rehabilitation e.g. wash vehicle down.

Weed control is required for at least 12-months post rehabilitation, to remove any emerging weeds within the rehabilitated area/s.

All materials and equipment used are to be clean and free from dirt that may contain weed seed.

A Weed Management Pan exists and species specific management will be developed if identified as required.

3.9 Maintenance and monitoring

Following rehabilitation works, vehicular access should be limited except where required for maintenance or monitoring work. Regular monitoring will be carried out to ensure:

- Vegetation re-establishment is on track and consistent with success criteria and surrounding land.
- Erosion and sediment control measures are effective.
- Weed species are controlled.
- Landforms remain stable.

Further maintenance work may be required in areas not showing the above features. For example, additional weed control, erosion control measures and planting may be required. Regular maintenance will be undertaken during and after the program to ensure that rehabilitated areas do not degrade or stall. See section 5 for detailed monitoring program.

4 REHABILITATION SUCCESS CRITERIA

Rehabilitation success criteria are performance objectives against which rehabilitation success can be measured. Success criteria are used to identify rehabilitation trends, and if a site meets, or is on a trajectory towards meeting, the success criteria. Performance objectives and rehabilitation success criteria for this project are defined in Table 4-1.

Rehabilitation success will be assessed based on monitoring data collected within the rehabilitation zone (i.e. seismic line) and an adjacent undisturbed area to be used as a benchmark comparison (i.e. analogue site). The monitoring program is described in Section 5.

Table 4-1. Rehabilitation success criteria

Aspect	Performance objective	Measurement criteria
Landform and soils	• The rehabilitated landform is equivalent to (and/or blends in with) the adjoining landform.	• Describe landform and soil of rehabilitation area and analogue site (including photographic evidence of each). • Document presence of scarring as a result of seismic works (i.e. wheel ruts, rake marks, windrows).
Erosion	• No adverse erosion issues directly associated with the Project. • Landform within rehabilitation area is stable	• No severe / significant active erosion to be present within rehabilitation area. • No active erosion issues (of any type) to be present on sensitive and/or erosion prone land types identified during baseline surveys – which include water ways (i.e. drainage lines), gilgai and calcrete or laterite rises. • Less than 2% cover of minor erosion issues (i.e. stabilised or likely to stabilise) across the rehabilitation area
Vegetation and habitat	• Dominant flora species in analogue sites are represented in rehabilitated areas. • Community structure of the rehabilitation is recognisable as, or is trending towards the target vegetation community. • Perennial species have established, and are expected to persist in line with analogue sites. • Habitat structures and quality is similar to analogue site, creating habitat connection to adjacent areas (for fauna native fauna).	• Ground cover foliage is at least 70% of the analogue site. This cover is likely to self-sustain over time and rehabilitated areas become ecologically integrated with surrounding areas. • Perennial species cover (i.e. woody species such as shrubs and small trees, may also include perennial grass/forb species if applicable) is at least 70% of the analogue site. • At least 80% of the dominant flora species in the mid and ground layers (strata) are present within rehabilitation site, when compared to analogue site. Note that the seismic program committed to avoiding disturbance of all large trees, so assessment of upper strata is not required for this project. • Rehabilitation area support at least 50% of the organic litter and coarse woody debris of the analogue site. • There is evidence that native fauna are utilising habitat within the rehabilitation area i.e. tracks, scats, burrows etc.
Weeds	• No adverse weed infestations associated with the Project.	• No establishment of weeds declared under the Northern Territory *Weeds Management Act*. • Non-declared weed species (i.e. Buffel Grass) cover to be at similar levels (or less than) to baseline and/or surrounding areas. • No evidence that indicates weeds have been spread long seismic lines.
Safety for humans and wildlife	• All hazardous material and waste have been removed and disposed of in a licensed landfill or recycling facility. • Rehabilitation of disturbance areas should be similar in landform to the surrounding area and not pose safety risk to humans or wildlife.	• No waste or rubbish associated with the seismic program, including removal of all surface facilities including fencing (star pickets/fencing wire). • No holes, steep slopes or barriers to remain on site, as these may be a safety risk to wildlife or humans (and will most likely not blend in with surrounding landform).

5 REHABILITATION MONITORING PROGRAM

The monitoring program is described below and presented in Table 5-1 and will be conducted by a suitably qualified person (i.e. environmental consultant / ecologist). It is designed to track the progress/success of rehabilitation, and to identify any issues that may require corrective actions (which are described in Section 5.3). Two main types of monitoring are proposed - 1) integrity checks and 2) vegetation monitoring.

Blue Energy understands that regular maintenance and annual monitoring of rehabilitated areas must take place to measure compliance with the Rehabilitation Plan. Blue Energy is committed to annual monitoring for at least a 5 years, or until success criteria have been achieved and signed off by the Minister.

Monitoring events will ideally occur between April and June, so that monitoring can suitably assess vegetation response and site integrity (i.e. erosion / stability) after the wet season.

If applicable, the monitoring program will also assess potential impacts of any AAPA Restricted Works Areas (RWAs) that occur adjacent to works area (it is noted that the current works program for lines 03B and 06C do not have any RWAs in close proximity).

5.1 Integrity checks

The first two annual monitoring events will include comprehensive 'integrity checks' to identify any issues (such as erosion, weeds, waste, contamination etc.), and recommend corrective actions where required. All disturbed areas will be inspected in the first two annual monitoring events. Integrity checks will also include documentation of general site condition at regular intervals (i.e. 5 km) along the seismic line, and at all instances where sensitive / RWA / erosion prone areas were crossed (i.e. waterways, Gilgai, rises etc.). This will provide evidence of site stability and integrity. After the first 2 monitoring events (years), the extent of the integrity check monitoring will be revised to target priority areas as per recommendations from monitoring reports (i.e. erosion impacted sites).

5.2 Vegetation monitoring

Vegetation monitoring will be conducted on an annual basis, and will occur in conjunction with integrity checks. The first monitoring event will involve the establishment of rehabilitation sites and analogue sites, and initial data collection on groundcover recruitment. Monitoring site dimensions will be a 100 x 4.5 m transect (i.e. to cover the width of the seismic line). Monitoring will be repeatable between events.

Rehabilitation sites and analogue sites will be coupled/paired together (i.e. each rehabilitation site will have its own relevant analogue site to be compared against). Analogue sites will be positioned adjacent to the rehabilitation site to be used as a direct comparison and benchmark to measure against the success criteria. This method is suited to long distance linear developments (such as seismic lines) in semi-arid landscapes as vegetation attributes can vary significantly within a vegetation type over relatively short distances due to isolated rainfall and other factors (i.e. fire, cattle).

Monitoring sites will be positioned to represent all vegetation types disturbed by the seismic works. Sampling within each vegetation type will be proportionate to cleared area, with site specific sampling in sensitive habitat / RWAs (if applicable). There will be an equivalent of at least one site per 10 km for each vegetation type. Sites will be positioned close to existing tracks (so they can be reasonably accessed once vegetation establishes) to minimises vehicle movement along lines once rehabilitation becomes progressed.

After year 5, monitoring data will be reviewed to determine if rehabilitation is deemed as successful, or if more monitoring / remediation is required from year 6 onwards. Once a site meets success criteria, it will be deemed as successfully 'rehabilitated', and further monitoring will not be required at that site.

Table 5-1. Rehabilitation monitoring schedule

Monitoring program		
Year	**Survey Type**	**Methodology**
Year 1	**Integrity check**	• Coverage – aim to survey the entire seismic works area (if access is possible). • Take photographs and general observations at regular intervals (i.e. 5 km), and when sensitive habitat is crossed (i.e. drainage lines, hills, dunes) to provide evidence that landform and soils have been restored to blend in with adjoining landform. • Document any issues encountered (i.e. weeds, erosion, waste) and recommend remediation if required. • Drone photography may be collected to assist with the assessment (i.e. ortho-rectificed imagery).

	Vegetation monitoring	• Select monitoring site locations (including analogue sites adjacent to each rehab site).
		  ○ Sites will be positioned to represent all vegetation types disturbed.
		  ○ Sample size to be proportionate to each vegetation type. There will be an equivalent of at least one site per 10 km of vegetation type cleared.
		  ○ Sites will be positioned close to existing access tracks so they can be reasonably accessed once vegetation establishes (this is to minimise vehicular movement along lines once vegetation becomes more progressed and established).
		• Preliminary data will be collected at each rehabilitation & analogue site (100x4m transect):
		  ○ Vegetation structure and general cover estimates of each layer (%)
		  ○ Ground layer cover % (visual estimate at 10 random 1x1m quadrats).
		  ○ Perennial species cover % (visual estimate at 10 random 1x1m quadrats).

Year 2	**Integrity check**	• As per Year 1

	Vegetation monitoring	• Additional monitoring sites may be included based on recommendations from previous monitoring event. Confirm locations of long term monitoring sites
		• The following will be collected at each rehabilitation & analogue site (100x4m transect):
		  ○ Vegetation structure and general cover estimates of each layer (%)
		  ○ Ground layer cover % (visual estimate at 10 random 1x1m quadrats).
		  ○ Perennial species cover % (visual estimate at 10 random 1x1m quadrats).
		  ○ Dominant species within mid and ground layers (strata), and upper layer if relevant.
		  ○ Litter cover % (visual estimate at 10 random 1x1m quadrats).

Years 3 to 5	**Integrity check**	• Limit survey coverage to priority areas only (as informed by recommendations from previous monitoring event).
	Vegetation monitoring	• Additional monitoring sites may be included based on recommendations from previous monitoring event. • Data collection as per methodology described in year 2.
Year 5	**Data review**	Conduct review of rehabilitation results to determine if additional integrity checks and vegetation monitoring is required, or if the program can be deemed as rehabilitated if it can be proven that success criteria are met.
Year 6	**TBC**	Requirement for further monitoring will be determined by recommendations from the comprehensive monitoring data review, and advice from the Department.

5.3 Corrective actions

The following corrective actions will be considered (but not limited to) based on monitoring results and recommendations.

- Erosion and sediment control remediation of failed erosion and sediment controls
- Review the re-profiling of the site to address any stabilisation issues. Undertake earthworks for re-profiling as necessary
- Weed control for infestations present due to seismic works
- If poor vegetation recruitment is identified (over large areas), the affected area may require soil raking and/or spreading debris over rehabilitation area to encourage seed capture from adjacent vegetation. Re-seeding / infill seeding is not proposed due to the thin nature of clearing and high level of edge effects from adjacent vegetation.
- Removal of waste / materials and disposal in a licensed landfill or recycling facility.
- Commence remediation immediately after contamination is detected in accordance with the Spill Response Management Plan and/or Emergency Response Plan

6 REPORTING AND RESPONSIBILITIES

6.1 Data management and reporting

Any rehabilitation works carried out will be recorded by the Site Manager. This information will be given to the Project Manager who will compile a report for senior management.

All monitoring data collected by staff or contractors will be provided to the Site Manager and stored in a database, for inclusion in final reporting.

All data and reports will be retained for the longer period of either 5 years following the period during which the petroleum interest for the activity is in force or 15 years after the record comes into existence.

6.2 Roles and responsibilities

Project employees and/or contractors will undertake rehabilitation works and monitoring under the direction of the Site Manager.

The Site Manager will compile monitoring data and information on rehabilitation works undertaken, and provide these to the Project Manager. The Site Manager will compile the final rehabilitation report under the direction of the Project Manager, for submission to relevant authority.

6.3 Reporting

Blue Energy will provide an annual Rehabilitation Report to DEPWS 90 days after the anniversary of the approval date each year. The annual Rehabilitation report will:

- Summarise progressive rehabilitation progress,
- Summarise the outcomes of annual rehabilitation monitoring of cleared areas against reference sites,
- Summarise maintenance activities and corrective actions taken to improve rehabilitation outcomes, and
- Include geospatial files for areas under rehabilitation.

7 REFERENCES

Department of Environment, Parks and Water Security (DEPWS) (2020). Rehabilitation Plan Guide for Surface Disturbance: onshore petroleum exploration. [online] Available at Rehabilitation Plan Guide for Surface Disturbance: onshore petroleum exploration (nt.gov.au) [accessed 06/04/2022].

Blue Energy (2022). *Onshore Petroleum Projects Environmental Management Plan – Wiso Basin Seismic Survey on EP200, 205 & 207).* Submitted in December 2022.

APPENDIX A PLAN TO A PAGE SUMMARY

Blue Energy
EP 205 & 207
Seismic Survey 2024
Rehabilitation plan to a page

Plan prepared by
EcOz Environmental Consultants

Plan to be read in conjunction with the main Rehabilitation Plan and the EMP.

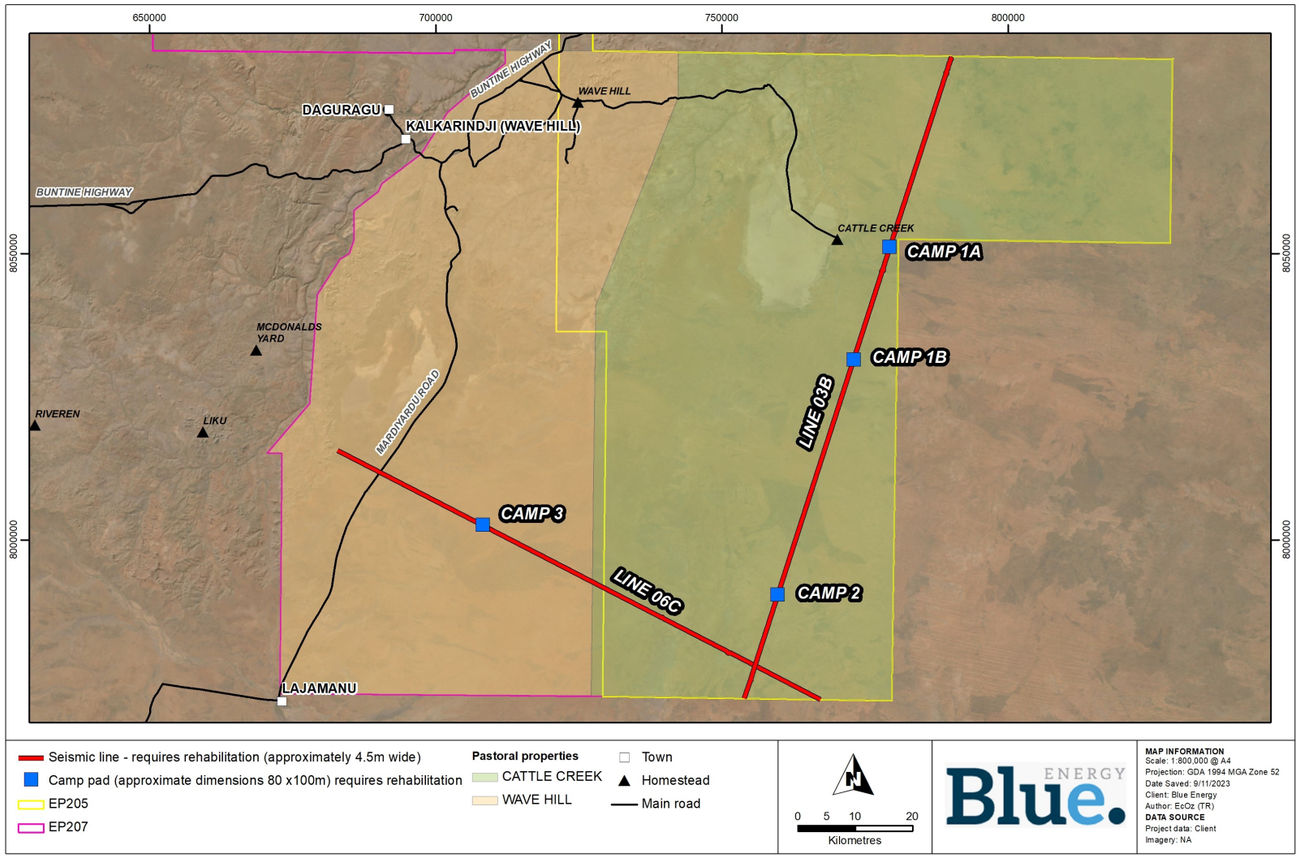
Rehabilitation contacts	Contact details	Name
Blue Energy Project Manager	0405 353 383	Mr William Ma
Rehabilitation Manager	TBA	TBA

Post activity rehabilitation aim and objectives	
Site management aim	The aim is to rehabilitate any part of the land affected by the regulated petroleum activity to a safe condition consistent with industry standards.
Rehabilitation objective	The rehabilitation objective is to provide a stable land form, which supports a resilient self-sustaining vegetation community that can withstand impacts including fire and cattle grazing and is safe to humans and wildlife, whilst utilising appropriate site infrastructure for ongoing pastoral activities (i.e. existing access tracks, water bores etc.).

***Note that vegetation community and rehabilitation zone maps and photos will be included in this document when the monitoring / analogue sites are established. To be selected as part of the first rehabilitation monitoring event. Refer to ecology report for land types.**

The following project components (zones) will be subject to rehabilitation because they will require vegetation clearing:

- **SEISMIC LINE 03B:** located within flat red sandplains that support hummock grass (spinifex) and open low trees and shrubs. Line preparation will avoid clearing large trees.
- **SEISMIC LINE 06C:** located within flat red sandplains that support hummock grass (spinifex) and open low trees and shrubs. Line preparation will avoid clearing large trees.
- **CAMPS 1A, 1B, 2 & 3:** located within flat red sandplains that support hummock grass (spinifex) and open low trees and shrubs. Camp pad will be positioned to avoid clearing large trees.



Path: C:\Users\tom.reilly.ECOZ\OneDrive - Ecoz\Documents\01. EcOz GIS Projects (TR) - new\EZ21217 (Tom) - Wiso Seismic Program\01 Project Files\RehabMP_RehabAreas v2.mxd

Rehabilitation Risks	
Key Risks	**Controls**
Drought — impacting the establishment of rehabilitated vegetation	• Time rehabilitation actions to coincide with the beginning of the wet season, to ensure access to the site and maximise the establishment period of vegetation over the wet season • Re-spread topsoil across the site to utilise the local seed bank • Ongoing monitoring to identify if further seed inputs are required • Collection of seed from the local area to ensure seed stock is suited to the climatic conditions of the site
Fire — impacting revegetation	• Dependent on rehabilitation area; establish a mix of perennial and annual grass species • Dependent on rehabilitation area; establish a mix of re-sprouter (e.g. Eucalypt spp. and re-seeder species e.g. Acacia spp.) • Ongoing monitoring to determine fire impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required
Grazing — impacting revegetation	• Dependent on rehabilitation area; establish a mix of perennial and annual grass species • Ongoing monitoring to determine grazing impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required • Ongoing monitoring to determine if fencing is required
Exposed Ground — leading to an increase in weed establishment and/or erosion	• Remove windrows and topsoils • Respread of topsoil and vegetated matter across the site • Annual weed surveys of rehabilitated areas once rehabilitation is established • Control of any weed incursions

Site Environmental Summary

Vegetation community	Survey Sites	Description	Canopy cover (%)	Ground cover (%)
TBA - Sites will be established during first rehabilitation monitoring event				

Rehabilitation strategy		
Parameters	**Methods**	**Objectives**
Vegetation	• Implement progressive rehabilitation of seismic lines as soon as data recording is completed to reduce exposed soils and minimise runoff from first flush events. • Implement rehabilitation of field camp upon cessation of use. • Disturbed areas to be allowed to naturally regenerate or revegetate on completion of regulated activity. • All compacted areas to be ripped and scarified to promote regeneration of vegetation, this may require assistance through spread of native seed stock. Where possible, native seed stock would be supplied by local Indigenous suppliers.	• Establish vegetation to be consistent to adjacent vegetation (species richness, cover and structure). • The type of ground cover applied to completed earthworks to be compatible with the anticipated long-term land use, environmental risk, and site rehabilitation measures.
Ground cover	• Previously removed vegetation and topsoil will be uniformly respread over disturbed area to assist with rehabilitation process through agencies of increased infiltration and return of seed-bearing topsoil, as well as reducing erosion. • If required, additional native seed mix from the area could be respread to speed up rehabilitation process.	
Landform stability	• All windrows and whoa boys are to be removed as soon as practicable after line stabilisation.	

Blue Energy
EP 200, 205 & 207
Seismic Survey 2023
Rehabilitation plan to a page

Plan prepared by ;
EcOz Environmental Consultants

Plan to be read in conjunction with the main Rehabilitation Plan and the EMP.

Monitoring program		
Year	**Survey Type**	**Methodology**
Year 1	**Integrity check**	• Coverage – aim to survey the entire seismic works area (if access is possible). • Take photographs and general observations at regular intervals (i.e. 5 km), and when sensitive habitat is crossed (i.e. drainage lines, hills, dunes) to provide evidence that landform and soils have been restored to blend in with adjoining landform. • Document any issues encountered (i.e. weeds, erosion, waste) and recommend remediation if required. • Drone photography may be collected to assist with the assessment (i.e. ortho-rectificed imagery).
	Vegetation monitoring	• Select monitoring site locations (including analogue sites adjacent to each rehab site). o Sites will be positioned to represent all vegetation types disturbed. o Sample size to be proportionate to each vegetation type. There will be an equivalent of at least one site per 10 km of vegetation type cleared. o Sites will be positioned close to existing access tracks so they can be reasonably accessed once vegetation establishes (this is to minimise vehicular movement along lines once vegetation becomes more progressed and established). • Preliminary data will be collected at each rehabilitation & analogue site (100x4m transect): o Vegetation structure and general cover estimates of each layer (%) o Ground layer cover % (visual estimate at 10 random 1x1m quadrats). o Perennial species cover % (visual estimate at 10 random 1x1m quadrats).
Year 2	**Integrity check**	• As per Year 1
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Year 6	**TBC**	• Requirement for further monitoring will be determined by recommendations from the comprehensive monitoring data review, and advice from the Department.

Corrective actions
The following corrective actions will be considered (but not limited to) based on monitoring results and recommendations. • Erosion and sediment control remediation of failed erosion and sediment controls • Review the re-profiling of the site to address any stabilisation issues. Undertake earthworks for re-profiling as necessary • Weed control for infestations present due to seismic works • If poor vegetation recruitment is identified (over large areas), the affected area may require soil raking and/or spreading debris over rehabilitation area to encourage seed capture from adjacent vegetation. Re-seeding / infill seeding is not proposed due to the thin nature of clearing and high level of edge effects from adjacent vegetation. • Removal of waste / materials and disposal in a licensed landfill or recycling facility. • Commence remediation immediately after contamination is detected in accordance with the Spill Response Management Plan and/or Emergency Response Plan

Rehabilitation success criteria		
Aspect	**Performance objective**	**Measurement criteria**
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Erosion	• No adverse erosion issues directly associated with the Project. • Landform within rehabilitation area is stable	• No severe / significant active erosion to be present within rehabilitation area. • No active erosion issues (of any type) to be present on sensitive and/or erosion prone land types identified during baseline surveys – which include water ways (i.e. drainage lines), gilgai and calcrete or laterite rises. • Less than 2% cover of minor erosion issues (i.e. stabilised or likely to stabilise) across the rehabilitation area
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Weeds	• No adverse weed infestations associated with the Project.	• No establishment of weeds declared under the Northern Territory Weeds Management Act. • Non-declared weed species (i.e. Buffel Grass) cover to be at similar levels (or less than) to baseline and/or surrounding areas. • No evidence that indicates weeds have been spread long seismic lines.
Safety for humans and wildlife	• All hazardous material and waste have been removed and disposed of in a licensed landfill or recycling facility. • Rehabilitation of disturbance areas should be similar in landform to the surrounding area and not pose safety risk to humans or wildlife.	• No waste or rubbish associated with the seismic program, including removal of all surface facilities including fencing (star pickets/fencing wire). • No holes, steep slopes or barriers to remain on site, as these may be a safety risk to wildlife or humans (and will most likely not blend in with surrounding landform).