

BOMEN SOLAR FARM – OPERATION AND MAINTENANCE

FIRE AND EMERGENCY MANAGEMENT PLAN





FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

REVISION HISTORY

The reason for the revision and the specific changes made to the document must be recorded in the details field below.

Number	Details	Author	Date
0.1	Initial draft for review	Owen Davies	17/01/2020
0.2	Updated site plans, incorporating review comments	Owen Davies	20/01/2020
1.0	Issue for review by stakeholders	Owen Davies	21/01/2020
1.1	Stakeholder comments incorporated, issued as final	Owen Davies	07/02/2020
1.2	Updated site plans	Owen Davies	07/02/2020

REVIEW AND APPROVAL STATUS

Role	Name	Endorsement Date
Delivery Manager Maintenance	Des Stakelum	21/01/2020
Projects HSE Manager	Margaret Fox	21/01/2020
Approver:	Kieren Lewis Head of Construction & Maintenance Services	21/01/2020

FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

DISTRIBUTION

This document has been distributed to the following people.

Role	Name	Email Address	Phone number	Date
Maintenance Delivery Manager	Des Stakelum	dstakelum@beon-es.com.au	0407 877 315	7/02/2020
Solar Farm Service Manager	Chris D'Aloia	cdaloia@beon-es.com.au	0419 102 454	7/02/2020
Solar Farm Site Manager	John Ford (Acting)	jford@beon-es.com.auj	0488 211 257	7/02/2020
Laura Baker	Project Controller	labaker@beon-es.com.au	0498 014 793	7/02/2020
HSE Advisor	Shane Adams	shaadams@beon-es.com.au	0498 339 818	7/02/2020
Projects HSE Manager	Margaret Fox	mafox@beon-es.com.au	0488 334 388	7/02/2020



Contents

BOMEN SOLAR FARM – OPERATION AND MAINTENANCE FIRE AND EMERGENCY MANAGEMENT PLAN	1
WHAT NEEDS TO HAPPEN	6
ICONS AND THEIR USE	6
1 INTRODUCTION	7
1.1 SCOPE OF WORK.....	8
1.2 DOCUMENT REVIEW	9
2 EMERGENCY RESPONSE TEAM STRUCTURE	10
2.1 SOLAR FARM, COLLECTOR STATION AND 132kV UG LINE.....	10
2.2 EMERGENCY PLANNING COMMITTEE (EPC)	10
2.3 EMERGENCY CONTROL ORGANISATION (ECO).....	11
2.4 EMERGENCY CONTROL ORGANISATION RESPONSIBILITIES	11
3 COMMUNICATION DURING AN EMERGENCY	16
4 EXTERNAL EMERGENCY CONTACTS.....	18
5 EMERGENCY RESPONSE EQUIPMENT	20
5.1 SELECTION AND INSTALLATION	20
5.2 FIRST AID	21
5.3 FIRE FIGHTING EQUIPMENT	21
5.4 INSPECTION AND MAINTENANCE	23
6 POTENTIAL FIRE HAZARDS IDENTIFICATION & RISK CONTROL MEASURES	25
6.1 FIRE ASSESSMENT	25
6.2 BUSHFIRE RISK MANAGEMENT.....	27
6.3 WORKING NEAR OR WITHIN THE HIGH PRESSURE GAS PIPELINE EASEMENT	28
7 SITE SPECIFIC EMERGENCY RESPONSE PLANS	30
7.1 ERP 1 SITE EVACUATION.....	31
7.2 ERP 2 BUSH FIRE.....	31
7.3 ERP 3 FIRE DUE TO WORKS	32
7.4 ERP 4 MEDICAL EMERGENCY.....	33
7.5 ERP 5 ASSET DAMAGE, UNDERGROUND / OVERHEAD.....	34
7.6 ERP 6 CHEMICAL OR SUBSTANCE SPILL	35
7.7 ERP 7 ELECTRIC SHOCK LV / HV RESCUE.....	36
7.8 ERP 8 BOMB THREAT	37



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

7.9	ERP 9 INCLEMENT WEATHER	39
7.10	ERP 10 MOBILE PLANT, LIGHT VEHICLE & HEAVY VEHICLE EMERGENCY.....	39
7.11	ERP 11 CONFINED SPACE EMERGENCY	40
7.12	ERP 12 POISONOUS ANIMAL BITES	41
7.13	ERP 13 ELEVATED WORK PLATFORM (EWP) AND WORKING FROM HEIGHT RESCUE	42
7.14	ERP 14 LIGHTNING.....	43
7.15	ERP 15 TRENCH / EXCAVATION COLLAPSE	44
7.16	ERP 16 BREACH OF HIGH PRESSURE GAS PIPELINE	46
7.17	EMERGENCY PRACTICE DRILLS	47
8	SITE DOCUMENTATION AND WORK INSTRUCTIONS.....	48
8.1	LEGISLATION AND STANDARDS.....	49

APPENDICES

A.1	EMERGENCY EVACUATION PLANS (MAPS)
A.2	SITE EVACUATION OBSERVATION REPORT FORM
A.3	SOLAR FARM CONSTRUCTION COMPOUND VEHICLE MOVEMENT PLAN
A.4	EMERGENCY PLANNING COMMITTEE TRAINING REGISTER
A.5	EMERGENCY PLANNING COMMITTEE (EPC) MEETING AGENDA
A.6	ROUTE TO HOSPITAL FACILITIES
A.7	ROUTE TO MEDICAL FACILITIES
A.8	PERSONAL EVACUATION EMERGENCY PLANS (PEEPS)



OPERATION AND MAINTENANCE

WHAT NEEDS TO HAPPEN

The Table below describes 'what needs to happen' to meet the requirements of this Fire & Emergency Management Plan (FEMP) , together with the persons who have been identified as Responsible for each task. A detailed description of each step is provided within the body of this Plan.

What needs to happen		Responsibility
1	Provide assurance to stakeholders that the organisation has sound, compliant and effective processes in place on site to manage and respond to potential emergency situations.	Defined in this plan Solar Farm Service Manager (Responsible) Supported by: Solar Farm Site Manager and others
2	Outline the key roles and responsibilities for the management of emergencies for operation and maintenance.	Defined in this Plan Solar Farm Service Manager (Responsible)
3	Outline mandatory processes and actions required to effectively manage specific responses to potential site emergencies so far as reasonably practicable on the site.	Defined in this Plan Solar Farm Service Manager (Responsible)
4	Verify compliance and achieve continuous improvement through emergency drills, audits and ongoing emergency response equipment inspection process.	Defined in this Plan Solar Farm Service Manager (Responsible) Supported by: Solar Farm Site Manager and others

ICONS AND THEIR USE

	➤ A reference that provides further information or assistance
	➤ A form or tool to help implement this Plan



OPERATION AND MAINTENANCE

1 INTRODUCTION

This Fire and Emergency Management Plan (FEMP) provides a framework for how emergency scenarios should be managed, and how evacuations (including drills) will be performed for the purposes of operation and maintenance. It is applicable to all personnel working at or visiting the Bomen Solar Farm, Collector Station and HV 132kV Under Ground Transmission Line. Importantly, this document is a first response plan enabling workers and management to act positively in the first few minutes of an emergency or crisis event, in order to save lives and where possible protect property.

The purpose of this FEMP is to:

- Identify any potential emergency situations that may arise
- To protect lives, property and the environment
- Ensure emergency response procedures (ERP) are in place to effectively respond to any foreseeable emergency

The FEMP shall provide site management and supervision personnel detailed guidance on:

- Roles and responsibilities of the project emergency response team
- Steps to take in preparation for a potential emergency
- Actions to consider during and after an emergency

The Beon Solar Farm Service Manager is responsible for the administration of the FEMP and maintains overall responsibility for the safety systems and processes with relation to operation and maintenance activities.

Scope of this plan

Beon uses a systematic approach to the management of incidents or issues that seriously affect or may affect our people, operations or reputation. Where possible, this approach uses existing infrastructure and procedures.

Beon has developed this approach to meet its legal requirements, standards of good governance and, importantly, to minimise the risk to its staff, contractors, partners and communities on the project site.

Guidelines, procedures and information contained within this plan are based upon Work Health and Safety Legislation, in conjunction with Australian Standard AS3745:2010 planning for emergencies in facilities.

This Plan also includes fire risks and controls for the site.



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

1.1 SCOPE OF WORK

Site	Bomen Solar Farm Operation and Maintenance		
Scope of Works (Operation and Maintenance)	<p>Operation and Maintenance of Bomen Solar Farm, Collector Station and 132 kV Underground Powerline. The solar farm has an installed capacity of 120MWp and consists of approximately 400,000 PV (photovoltaic) modules connected to a Collector Station on site to a Transgrid Terminal station via 3.5 km underground 132kV cable.</p> <p>Operation and Maintenance activities will consist of:</p> <ul style="list-style-type: none"> • HV Operating and Switching • First response and fault rectification • Weed control • Mowing and slashing • Watering and management of vegetation • Module / Panel cleaning • General maintenance (e.g. fencing) • Preventative maintenance • Grazing activities 		
Location	Bomen Industrial Estate, located 8km from Wagga Wagga CBD		
Address	Trahairs Road, Bomen, New South Wales 2650	Latitude: -35.05095	Longitude: 147.44079
Access points	Refer to gate locations shown in the Emergency Evacuation Plans in Appendix A.1		
Communication Protocols	Access Points / UHF Channel 14		
High Risk Works	<ul style="list-style-type: none"> • Working at Heights • Working near water, involving risk of drowning • Working on or near energised electrical installations or services • Working in an area with movement of powered mobile plant 		
Site work hours	<p>Scheduled works: Generally programmed to occur Mon-Fri (7am to 6pm) Sat (8am to 1pm)</p> <p>First response or critical maintenance: At any time (24 hour access)</p>		
Max no of people on site	Solar Farm	10	Collector Station & HV UG Transmission Line 10



1.2 DOCUMENT REVIEW

Following any exercise or emergency situation, the Operation and Maintenance team will conduct an assessment of the emergency response process and determine where deficiencies may exist. Improvements that need to be made will be reported to the Solar Farm Service Manager and handled in accordance with the site Work Health & Safety Management Plan.

This FEMP shall be reviewed regularly, the period of review being no greater than 12 months OR following an exercise or emergency situation or incident that requires the FEMP to be amended. This shall include any internal or external audit corrective actions or changes in legal requirements. Site Emergency Control Organisation (ECO) personnel will also be considered during review of the FEMP.

Induction into the requirements of this FEMP and appropriate training shall be conducted to ensure that the FEMP requirements and associated revisions when executed are communicated to relevant stakeholders.

OPERATION AND MAINTENANCE

2 EMERGENCY RESPONSE TEAM STRUCTURE

The following table provides a list of key Beon personnel that can be contacted for operational information, incident notification and emergencies.

2.1 SOLAR FARM, COLLECTOR STATION AND 132KV UG LINE

Contact Title	Role Emergency	Responsible Person	Phone number
Solar Farm Site Manager	Chief warden	TBA	TBA
Solar Farm Technician 1	1st Deputy Chief Warden	TBA	TBA
Solar Farm Technician 2	2nd Deputy Chief Warden	TBA	TBA
Solar Farm Technician 3	3rd Deputy Chief Warden	TBA	TBA
Solar Farm Technician 1, 2 or 3	Warden	TBA	TBA
Solar Farm Technician 1, 2 or 3	First Aider	TBA	TBA

2.2 EMERGENCY PLANNING COMMITTEE (EPC)

Solar farm management shall establish the site Emergency Planning Committee (EPC). The group is formed to develop and implement the contents of this Fire & Emergency Management Plan . The EPC shall:

- Include personnel who are responsible for and have onsite expertise (i.e. site managers, supervisors, HSE representatives)



OPERATION AND MAINTENANCE

- Have responsibility for forming the Emergency Control Organisation (ECO) and ensure all positions are appointed
- Document, implement and review of this site Fire & Emergency Management Plan
- Arrange for education and training of Emergency Control Organisation personnel
- Review and identify deficiencies and update emergency management procedures
- Arrange for and review the effectiveness of excavation drills
- Responsible for implementing personal emergency excavation plan (PEEP) for personnel with disabilities
- Arrange, conduct and record a EPC site meeting (Appendix A.5)



Emergency Planning Committee (EPC) Meeting Agenda

2.3 EMERGENCY CONTROL ORGANISATION (ECO)

The Site EPC shall appoint personnel to direct and control the implementation of the sites Emergency Response Procedures.

An Emergency Control Organisation (ECO) will be established at the site to enact and facilitate the implementation of the emergency plans and procedures during any identified emergency incident at the site.

The priority of any actions performed by the ECO during an emergency is the preservation and protection of occupants / life safety. This shall take precedence over asset protection.

Primarily, the structure of the site ECO should consist of personnel appointed to the following positions:

- Chief Warden
- Deputy Chief Warden
- Wardens
- Deputy Wardens
- First Aiders

During an emergency, instructions given by ECO members and in particular the Chief Warden take precedence over normal management structure / hierarchy.

2.4 EMERGENCY CONTROL ORGANISATION RESPONSIBILITIES

2.4.1 CHIEF WARDEN

2.4.1.1 POSITION DESCRIPTION

The Chief Warden is required to respond to any emergency situation, determine what emergency procedures should be implemented, and assume control until the Emergency Service arrives.



OPERATION AND MAINTENANCE

The Chief Warden is responsible for the overall management of the incident until the arrival of the appropriate Emergency Service, and remains the principle point of liaison between the site and the Emergency Services throughout the incident.

2.4.1.2 TRAINING

The Chief Warden should have undergone training delivered by a registered training organisation (RTO). The Chief Warden shall additionally have a good knowledge of the site layout, and whose duties do not require frequent absences from the site.

2.4.1.3 RESPONSIBILITIES

The Chief Warden will ensure that the site Emergency Evacuation Plan (map) is documented showing the key emergency response features including the location of all emergency equipment, Muster Point(s) and routes for egress to these assembly points. The site map will be attached to this FEMP and a copy will be clearly displayed and communicated to all personnel.

The Chief Warden is responsible for ensuring that the following is implemented:

- Provides people, equipment, technology and any other resources needed to implement the requirements of this plan
- Coverage by a Deputy Chief Warden during any absence from site
- Escalating up the incident and actions being taken to the Beon Management
- Determine the need to evacuate – select appropriate Assembly Area(s)
- Initiate and communicate evacuation as appropriate
- Monitor progress of evacuation – liaise with Wardens to ensure all occupants accounted for -
- Record any actions taken in incident log
- Brief and liaise with emergency services upon arrival – provide update or information relating to the status of the evacuation (all personnel accounted for / people missing)
- Coordinate first aid treatment – if required
- Advise neighbouring properties of emergency – if required
- Assist emergency services – as required
- Provide “Stand Down” on instruction from emergency services
- Report to management
- Debrief
- Ensure notification to client of any incident or emergency involving their assets
- Nominates ECO personnel or organisation
- Ensures nominated ECO personnel or organisations are appropriately trained or otherwise experienced in their role
- Communicates to all ECO personnel their roles and responsibilities under this plan
- Coordinates ECO personnel in an emergency
- Prepare Incident report to identify direct, indirect and root cause
- Ensure all Beon personnel and contractors are fully inducted and aware of the site Fire & Emergency Management Plan
- Schedule and practice basic evacuation techniques and principles with Beon Personnel and contractors, at least 6 monthly to ensure compliance with this Fire & Emergency Management Plan



OPERATION AND MAINTENANCE

2.4.2 DEPUTY CHIEF WARDENS

2.4.2.1 POSITION DESCRIPTION

The Deputy Chief Wardens who shall be trained and will perform the same roles and duties as the Chief Warden when called upon in their absence. The Deputy Chief Wardens will therefore need to undergo the same training as the Chief Fire Warden qualification and have the same thorough knowledge of the site.

2.4.2.2 TRAINING

The Deputy Chief Wardens should have undergone appropriate training relative to the roles and responsibilities of the Emergency Control Organisation (ECO), have a good knowledge of the site layout, and whose duties do not require frequent absences from the site.

2.4.2.3 RESPONSIBILITIES

The Deputy Chief Wardens will assist the Chief Warden in ensuring the continuity of ECO Team activities, including evacuation exercises and debriefing.

In the event of an emergency, and when both the Chief Warden and the Deputy Chief Wardens are on site, the Deputy Chief Wardens will assist the Chief Warden in the overall management of the incident or emergency.

2.4.3 WARDEN

The EPC shall identify and appoint an adequate number of site Wardens / deputies to assist with the management of emergency situations that may arise at site (one warden per 25 employees is recommended). Wardens shall be identifiable by their apparel (white hard hat for Chief and Deputy Wardens and red hard hats for Wardens / assistants).

More specific duties of Wardens are contained in the local Emergency Response Plans

2.4.3.1 POSITION DESCRIPTION

The Warden has the authority to evacuate their area of responsibility if they consider there is any danger to occupants.

2.4.3.2 TRAINING

Wardens shall be trained by the Chief Warden and shall direct and control emergency procedures as directed by the Chief Warden. The Warden should have undergone training relative to the roles and responsibilities of the ECO Team, and have good knowledge of the layout of their work area, particularly emergency response equipment locations.

2.4.3.3 RESPONSIBILITIES

The Warden will assist the Chief Warden in ensuring the continuity of emergency response activities, including evacuation exercises and debriefing. The Warden will assist the Chief Warden in reporting on outcomes of emergencies and drills/exercises.

OPERATION AND MAINTENANCE

Wardens will assist the Solar Farm Site Manager in the assessment of fire protection equipment requirements for the site and conduct regular inspections and maintenance of the equipment. Wardens will assist/take direction from Emergency Services Personnel during an emergency.



Warden ECO Training Pack

2.4.4 FIRST AID OFFICER

2.4.4.1 POSITION DESCRIPTION

The First Aid Officer is responsible for providing primary care to any personnel suffering from injuries prior to the arrival of the appropriate Emergency Service.

The First Aid Officer is therefore required to undergo training to enable them to provide this care. The First Aid Officer should have a thorough knowledge of the roles and responsibilities of the ECO Team.

Prerequisites Type	Description
Provide First Aid (Level 2 first aid equivalent) General First aid officer Person can assess the workplace first aid requirements to use form Project First Aid and Fire Assessment	Provides competencies required to recognise and respond to common life-threatening injuries or illnesses, including life-support using cardiopulmonary resuscitation (CPR), snake bite/anaphylactic reaction, burns and to manage the casualty and incident until the arrival of medical or other assistance.

2.4.5 TRAINING

Records of training shall be retained by the site management and site skills matrix updated to reflect training and competencies.

Site personnel in charge of maintenance assets including laydown areas are to be briefed by the local Chief Warden regarding the relevant emergencies identified in the local Emergency Evacuation Procedures

Activity	Requirement	Frequency
Emergency Planning Committee (EPC)	Nominate validity date of emergency plan/evacuation diagram Initial test emergency procedures Review and test emergency plan procedures EPC Meeting	Initially



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

Evacuation Diagrams	Ensure validity date inserted on diagram	Initially
Emergency Control Organisation (ECO)	Training general Communications system	Initially as required At monthly intervals or as determined by the EPC
Chief Warden, Deputy Chief, Wardens	Additional role specific training	Additional role specific training
Emergency response Drill / Exercises	Within 6 weeks of commencement of O&M activities & 6 monthly there after	Higher risk sites may require more frequent drills (e.g. 3 monthly)



OPERATION AND MAINTENANCE

3 COMMUNICATION DURING AN EMERGENCY

3.1.1 ON SITE

In the event of any emergency, the Solar Farm Site Manager or delegate must be contacted immediately. The Solar Farm Site Manager or delegate shall act as Chief Warden. All personnel acting as Emergency Wardens must have completed Chief Warden training and have reviewed and approved the Emergency Response Plans.

Select method for notifying personnel of evacuation

1 long continuous blast of the air horn	<input type="checkbox"/>	SignonSite app	<input checked="" type="checkbox"/>
Verbal notification	<input checked="" type="checkbox"/>	Notification by radio or mobile phone	<input checked="" type="checkbox"/>
Other:			

- Once the evacuation notification has been made all work stops and all workers are to evacuate the site.
- Evacuating workers shall leave the work site and assemble at the allocated muster point/s (MP) as shown on the site plans in Appendix A.1. Alternative muster points for personnel working away from the designated muster points will be detailed on the daily JSEA.

Where the work group is spread out over more than one location, the Emergency Warden may also need to contact work group supervisors by mobile phone, radio or the Sign on Site app to notify of an evacuation. Verification by phone or two- way radio contact with all site contractors, shall be made, to confirm that all workers have assembled at the Muster point and a record of this is to be logged on the Site Attendance Register or via the Sign on Site app. After the evacuation event, the Emergency Warden shall report the event and nature of the incident that lead to the evacuation of the site, to the Solar Farm Service Manager.

3.1.2 AFTER HOURS

In the event of an after-hours emergency, the Beon Duty Officer will notify the Beon Solar Farm Site Manager who will attend the scene or will immediately contact emergency services. The person attending the scene will coordinate resources, including Site ECO Team members, to mitigate the impact of the emergency situation.

The emergency communication processes for site will be covered in the Site Induction



JSEA

SignonSite



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

3.1.3 NOTIFICATION TO DPIE

All incidents must be notified in writing to the DPIE immediately. This is in accordance with Condition 3 of Schedule 4 of the Development Consent.

Condition 3 of Schedule 4 states that this notification must be provided via email to compliance@planning.nsw.gov.au, however this process has since been superseded by DPIE. DPIE now require incident notifications to be submitted online via the Major Projects Website - <https://www.planningportal.nsw.gov.au/major-projects/project/3501>

The incident notification submitted online must set out the nature and location of the incident.



4 EXTERNAL EMERGENCY CONTACTS

EXTERNAL EMERGENCY CONTACTS			
Fire, Ambulance, Police	AMBULANCE, POLICE & FIRE Dial 000 (Mob 112) and ask for Emergency Services.		
	Advise telephone operator of incident and wait for directions on information required.		
	DIRECTIONS TO SITE LOCATION:		
	<div><div>1. Travel north or south on Byrnes Road.</div><div>2. Turn east onto into Trahairs Road.</div></div> <div>3. ADVISE - THERE MAY BE AN ESCORT VEHICLE WAITING ON THE SITE ACCESS ROAD THAT WILL FLAG DOWN THE EMERGENCY SERVICES VEHICLE TO ESCORT THEM STRAIGHT TO THE LOCATION.</div> <div>4. STOP AT RELEVANT GATE WHERE AN ESCORT VEHICLE WILL BE WAITING TO ESCORT THE EMERGENCY VEHICLE/S ON SITE.</div>		
Local fire authorities – direct	<div>1. NSW Rural Fire Service, 208 Fernleigh Road Wagga – BH 02 6971 4500 / AH 02 6971 4591</div> <div>2. Fire and Rescue NSW Turvey Park Station, 75 Fernleigh Road, Turvey Park NSW (02) 6921 3022</div> <div>1)</div>		
Safety incidents (notifiable)	SafeWork NSW 13 10 50	Pollution incidents	NSW EPA 131 555
Poison information	13 11 26	Heritage (Aboriginal or European)	NSW Office of Environment and Heritage 131 555
Fauna (animal removal including snakes)	WIRES 1300 094 737	Native veg pests and weeds	NSW Department of Primary Industries 02 9338 6666
Employee Assistance Program	Name Converge International		T 1800 337 068
Medical Centre	Name Trail Street Medical Centre Address 69 Trail Street NSW 2650		T 02 6921 3990
Hospital	Name Wagga Wagga Base Hospital Address Docker Street Wagga Wagga NSW 2650		T 02 5943 1000
All incidents must be notified online to the Department of Planning and Environment immediately at via the Major Projects Website - https://www.planningportal.nsw.gov.au/major-projects/project/3501			



NEVER COMPROMISE
health & safety



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

OPERATION AND MAINTENANCE

5 EMERGENCY RESPONSE EQUIPMENT

Availability and sourcing of the emergency response equipment is the responsibility of the Solar Farm Site Manager or emergency control personnel as nominated by the Solar Farm Service Manager. The response equipment required shall be based on the activities considered of a risk level that requires equipment response / controls.

5.1 SELECTION AND INSTALLATION

The HSE risk assessment and Project First aid and fire assessment shall identify suitable equipment required to effectively deal with any potential emergency situation that has been identified.

The equipment will be located at strategic locations as required to effectively deal with emergency situations should they arise. This emergency equipment shall be

- Clearly visible and easily accessible at all times
- Placed where it will be of most potential use, i.e. close to but not next to potential hazards and where required
- Identified by clear and concise signage, for example Fire Extinguisher usage signs

The Solar Farm Site Manager will engage appropriately qualified and trained personnel to select, install, inspect and maintain emergency response equipment. Site located Fire Extinguishers and Fire Blankets will be as per Australian Standard AS 2444-2001 Portable Fire Extinguishers & Fire Blankets – Selection & Location. Typically, this will be facilitated by the Operation and Maintenance team and may include but not limited to the equipment listed within Table.1

Equipment Type	Supplies / Maintenance
First Aid Equipment	First Aid Officer in conjunction with Supplier
Fire Extinguishers	Equipment Supplier or Local Service Agent
Radio Equipment	Equipment Supplier or Solar Farm Site Manager or delegate
Fall Arrest	Equipment Supplier or Person trained in Working at Heights
Height rescue kit	Equipment Supplier or Person trained in Working at Heights
Defibrillator	Equipment Supplier
Low Voltage Rescue Kits	Testing organisation
Confined / restricted space	Equipment Supplier or Local Service Agent

OPERATION AND MAINTENANCE

5.2 FIRST AID




Prior to the commencement of operation and maintenance activities, a team member with current First Aid (Level 2) training will complete a First Aid and Fire Assessment to determine the type, number, locations of First Aid facilities and the number of trained first aiders required. The assessment will consider:

- The nature of the work
- The nature of the hazards
- The size, location and nature of the work site
- The number and composition of workers on site

Guidance on the type and number of first aid kits required is provided in the table below. First Aid Kits will be located at signed locations around the site in accordance with the outcome of the assessment.

A list of First Aiders, and the locations of the nearest hospital and/or medical centre, will be displayed on the HSE Board and communicated in the Site Induction.

The following first aid equipment as identified per First Aid and Fire Assessment and will be made available on this site:

Tick	First Aid Kit Selection Guide (to be used in conjunction with the First Aid and Fire Assessment form)				
<input type="checkbox"/>	Type of Work/Risks	First Aid Kit/s	Type	No	Locations
<input checked="" type="checkbox"/>	High risk tasks e.g. Working at heights, CSE, excavations	Standard Workplace National Kit		1	Maintenance building
<input checked="" type="checkbox"/>	Work on/near live electrical equipment	Standard Workplace National Kit + Burns Kit + Remote module		1	Substation control room
				1	Operational Vehicles
<input checked="" type="checkbox"/>	Hazardous Substances	Standard Workplace National Kit + Eye Wash		1	Maintenance building Substation control room



Emergency Contacts List for HSE Noticeboard

First Aid and Fire Assessment

First Aid Kit contents List and audit form

5.3 FIRE FIGHTING EQUIPMENT

Prior to the commencement of operation and maintenance activities, a team member with Chief Warden training will complete an assessment to determine the type, number and locations of fire extinguishers. The assessment will consider:

FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

- The nature of the work
- The nature of the hazards (including electrical) including ignition sources
- The types of flammable and combustible materials on site and the types of extinguishers that would be used for a fire

Guidance on the type of fire extinguishers required is provided in the table below. Fire extinguishers will be located at signed locations around the site in accordance with the outcome of the assessment.

Fire extinguishers must be visually inspected by operation and maintenance personnel in accordance with the General Site Safety Inspection form. In addition fire extinguishers must be tested and tagged every 6 months by an accredited testing company and records available on a register.

The following firefighting equipment as identified per First Aid and Fire Assessment and will be made available on this site:

Tick	Type	Type of fire	Locations
<input checked="" type="checkbox"/>	20,000 litre water tank fitted with 65mm Storz fitting	Combustible material (e.g. grass, paper, wood)	Western side of Maintenance building
<input checked="" type="checkbox"/>	9 litre Water Extinguisher	Combustible material (e.g. grass, paper, wood)	Operational Vehicles
<input checked="" type="checkbox"/>	Rake Hoe	Embers, fire breaks	Maintenance building
<input checked="" type="checkbox"/>	9 kg Dry Powder (ABE) Extinguisher	Solids (wood, paper, cloth etc.) , flammable liquids, flammable gases, electrical equipment	Maintenance building Substation control room
<input checked="" type="checkbox"/>	9 kg Foam Extinguisher	Solids (wood, paper, cloth etc.)	Substation control room
<input checked="" type="checkbox"/>	3.5 kg CO2 Extinguisher	Electrical equipment	Substation control room Operational Vehicles
<input checked="" type="checkbox"/>	Fire Blankets	Person on fire, Cooking	Lunch room – Maintenance building



Firefighting Equipment Register

OPERATION AND MAINTENANCE

5.4 INSPECTION AND MAINTENANCE

All emergency equipment will be maintained in line with legal requirements and manufacturers recommendations. Emergency equipment shall be recorded and checks carried out using the Emergency Equipment Register.

Competent personnel shall be appointed with responsibility for the ongoing inspection and maintenance of all emergency and safety equipment.

The following inspection schedule must be completed at each site

On site	Equipment	Location	Test/Inspection Frequency	Testing Party
<input checked="" type="checkbox"/>	Fire Extinguishers	Maintenance buildings, Substation control room Organisation vehicles	6 Monthly Test	External
<input checked="" type="checkbox"/>	Emergency Lighting	Maintenance buildings, Substation control room	6 Monthly Test	External / Internal
<input checked="" type="checkbox"/>	Fire Blankets	Located in Lunch rooms	6 Monthly Insp	External
<input checked="" type="checkbox"/>	Smoke Alarms	Administration office and transportable buildings	12 Monthly Insp	Internal – Warden
<input checked="" type="checkbox"/>	Fire Panels	Maintenance buildings and Substation control room	1 Monthly Insp	Internal – Warden
<input checked="" type="checkbox"/>	Spill Kits (General & Chemical)	Mobile Plant yard Site work containers	3 Monthly Insp	Internal – Warden
<input checked="" type="checkbox"/>	First Aid Kits	Maintenance buildings, Substation control room Organisation vehicles	Within 6 weeks of commissioning starting & 3 Monthly Insp	Internal – Warden
<input checked="" type="checkbox"/>	Eye Wash Station(s)	Substation control room	3 Monthly Insp	Internal – Warden
<input checked="" type="checkbox"/>	Automated External Defibrillator (AED)	Maintenance building	As per manufacturer's instructions & relevant sections of AS 3200.2.4:2006	External
<input checked="" type="checkbox"/>	LV Rescue Kits	Substation control room	6 Monthly Test	External
<input checked="" type="checkbox"/>	Rescue equipment such as fall arrest systems.	Site Materials Store	6 Monthly Test	as per AS1891.4



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

<input checked="" type="checkbox"/>	20,000L Water Tank with 65mm Storz fitting	Compound & adjacent to the Substation	Monthly or after use. Rescue equipment so clear access at all times no parking.	Internal – Warden
-------------------------------------	--	---------------------------------------	---	-------------------

OPERATION AND MAINTENANCE

6 POTENTIAL FIRE HAZARDS IDENTIFICATION & RISK CONTROL MEASURES

The aim of the fire hazard identification is to identify the site activities that have a potential to create a fire and that would require a level of a response to extinguish and control. The process is to highlight fire risks associated with the works and the interaction of the site (as a whole) with the surrounding environment. The fire assessment process involves documenting all possible events that could lead to a hazardous fire incident at site, control measure to prevent occurrence and emergency response process required.

6.1 FIRE ASSESSMENT

Sources of Ignition	Sources of Fuel & ignition source	Type of Fire	Control Measures	Fire hazard rating	Fire Response & Fighting Equipment Required	Location of Equipment on site
Breach of high pressure gas pipeline	Flammable Gas- Piercing or puncture of high pressure gas pipeline	Gas	Refer to Section 6.3 'Working near or within the high pressure gas pipeline easement' for controls to mitigate the risk of a breach.	High – Large	Refer to Emergency response plan no ERP 16	Refer to maps in Appendix A.1
Solar Panel Fire	Electrical fault	Electrical fire	Isolation of panel array	Low – Small initial size	ABE Dry Powder Extinguishers Carbon Dioxide Extinguisher	Extinguisher located within 10 metres of all site offices, amenity buildings and stores areas.
Bush fire	External bushfire encroaching onto site Site hot works activities that create a spark causing a grass fire that spreads to the surrounding bushland	Grass	Refer to section below this table (Section 6.2) which lists measures to mitigate bushfire risk. No hot works shall occur on Total Fire Ban days unless a Total Fire Ban exemption is obtained from the NSW Rural Fire Service.	High – Large	20,000 litre water supply (tank) fitted with a 65mm storz fitting	Refer to maps in Appendix A.1



OPERATION AND MAINTENANCE

Sources of Ignition	Sources of Fuel & ignition source	Type of Fire	Control Measures	Fire hazard rating	Fire Response & Fighting Equipment Required	Location of Equipment on site
Naked flames, fire, sparks from grinders, electrical & electronic equipment (i.e. mobile phones) Cigarette butts	Flammable liquid (Diesel storage)	Grass	No hot works shall occur on Total Fire Ban days unless a Total Fire Ban exemption is obtained from the NSW Rural Fire Service.	Low – Small initial size	20,000 litre water supply (tank) fitted with a 65mm storz fitting located adjoining the internal property access road within the required	2 x 50 litre Foam fire extinguishers located next to Diesel storage cell/tank
Hot surfaces / components on Plant & Equipment (i.e. exhaust manifolds) Cigarette butts	Dry flora –grass etc., general rubbish/ combustible material on site	Grass, paper , wood fires Engine fires	<p>Firefighting control measures implemented</p> <p>e.g. Fire Extinguishers</p> <p>All vehicles leaving the made road are to be high ground clearance and diesel powered to ensure no heated areas come into contact with combustible material.</p> <p>In addition all vehicles must be maintained in a serviceable condition so as to prevent the outbreak of fire, and be fitted with prescribed fire safety equipment, and no sparks generated (refer to NSW Rural Fire Regulations 2013, Part 4 Section 22)</p> <p>Pre-summer vehicle check by mechanic including exhaust and underbody</p>	Low – Small initial size	ABE Dry Powder and/or Water fire extinguishers.	<p>Compound – refer to emergency evacuation maps posted on site noticeboard/ site induction.</p> <p>ABE Dry Powder extinguishers located and available on all Plant & Equipment, Light Vehicles on site.</p>



OPERATION AND MAINTENANCE

Sources of Ignition	Sources of Fuel & ignition source	Type of Fire	Control Measures	Fire hazard rating	Fire Response & Fighting Equipment Required	Location of Equipment on site
Faulty electrical equipment & fittings / White Goods – Located in site offices amenities , stores compound area	Office furniture and contents, paper	Electrical fire, Paper/ wood fire	Firefighting control measures implemented e.g. Fire Extinguishers	Low – Small initial size	ABE Dry Powder Extinguishers Carbon Dioxide Extinguisher (Electrical fires)	Extinguisher located within 10 metres of all site offices, amenity buildings and stores areas. Refer to emergency evacuation maps posted on site noticeboard/ site induction.
Naked flames from gas torches used for heat shrinking, Sparks, hot slag from grinding/ welding operations	Combustible materials in area	Grass, paper, wood fires other combustible materials in area	No hot works shall occur on Total Fire Ban days unless a Total Fire Ban exemption is obtained from the NSW Rural Fire Service.	Low – Small initial size	ABE Dry Powder and/or Water Extinguisher	Located in immediate work area where hot works is being conducted as captured in task JSEA controls
Incompatible chemicals being stored together	Other chemicals	Chemical fire	Firefighting control measures implemented e.g. Fire Extinguishers	Low – Small initial size	ABE Dry Powder and/or Foam fire Extinguishers	ABE Dry Powder extinguisher located at chemical storage sea container, 50 litre Foam Extinguisher located within 10 metres of chemical storage

6.2 BUSHFIRE RISK MANAGEMENT

The following measure shall be implemented to mitigate bushfire risk.

- ▶ The entire solar array footprint and 10 metre defendable space around the solar arrays is to be managed as an Asset Protection Zone (APZ). The 10 metre defendable space and the solar array footprint is shown on map in Appendix A.1. Weed spraying and grass slashing around and under solar arrays will be undertaken as part of operation and maintenance activities to minimise the available fuel load.
- ▶ The 10 metre defendable space is to be kept clear of obstructions and should be regularly maintained to allow for safe access and passing of fire fighting vehicles.
- ▶ Grass height within the APZ is to be regularly managed and kept less than 150mm in height. Grass clippings when dry, can become a fire hazard if they are allowed to accumulate. This hazard should be managed prior and during the declared fire season by removal of accumulated grass clippings. Outside the fire season the clippings can be left in situ and allowed to decompose.
- ▶ No brush type fencing is to be used within the APZ.
- ▶ Prune low branches 2 metres from the ground to prevent a ground fire from spreading into trees.
- ▶ Weeds are to be managed as per the WHSEMP.



OPERATION AND MAINTENANCE

- ▶ Native trees and shrubs can be retained as clumps or islands and should maintain a cover of no more than 20% of the APZ area. The canopy crowns should be separated by 2 to 5 metres. A canopy should not overhang within 2 to 5 metres of an infrastructure asset or buildings.
- ▶ No hot works shall occur on Total Fire Ban days unless a Total Fire Ban exemption is obtained from the NSW Rural Fire Service.
- ▶ Fires of any type are not permitted on the Site.
- ▶ During the declared fire danger period and Total Fire Ban Days, all vehicles travelling off a formed roadway or gravel surface shall comply with the requirements of Vehicle Fire Equipment and Vehicle Movement and Section 21 Use of Spark arresters and 22 Other safety requirements of Part 4 Fire Prevention of the Rural Fire Regulations 2013.
- ▶ All vehicles leaving the made road are to be high ground clearance and diesel powered.
- ▶ Fire danger shall be assessed by the Solar Farm Site Manager or delegate and documented on the Daily JSEA. The Solar Farm Site Manager or delegate shall maintain awareness of Total Fire Ban days (TFB's) and forecast weather conditions.
- ▶ This may include subscribing to notifications and/or using the relevant smart phone App – see link - <https://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans> and www.bom.gov.au

6.3 WORKING NEAR OR WITHIN THE HIGH PRESSURE GAS PIPELINE EASEMENT

This 20 m wide high pressure gas pipeline easement through the site contains the Young to Wagga Wagga Natural Gas Pipeline (refer to Solar Farm Site Plans in Appendix A.1). It is a looped pipeline, with two lines within the 20m wide easement.

A summary of the pipeline's characteristics is provided below:

Name	Young to Wagga Wagga	Looping
Constructed/Commissioned	1981	~2010
Outside Diameter	323.8mm	457mm
Wall Thickness	6.35mm	9.7mm
Pipe specification	API 5L Grade X46	API-5L Grade X70
MAOP / MOP	8.5MPa	10.2MPa
Depth of cover (from alignment sheets, at this location)	750mm 1.2m under road	1.2m
Measurement Length	294m	452m
Critical Defect Length	85.1mm	89.2mm

FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

No ground penetrations are permitted within the pipeline easement without approval from APA and the Solar Farm Service Manager.

Threat	Control
Unauthorised activities undertaken within the pipeline easement.	<ul style="list-style-type: none"> ▶ For works on the easement, an APA third party works authorisation must be in place, and onsite supervision arranged. Agreements are in place, and supervision is on site. A minimum 2 weeks' advance notice is requested; APA approvals may take up to 1 month to obtain.
Vehicular crossings over the pipeline easement	<ul style="list-style-type: none"> ▶ Equipment heavier than 8 tonne axle load crossing the pipeline requires approval from APA. ▶ No removal of cover is permitted. Any earthworks required within the easement is to be approved by APA. ▶ Vehicle gates across the pipeline easement will be required to be installed with APA-keyed locks. ▶ No heavy loadings are to be stored over the pipeline.
Unexpected subsidence occurs on the pipeline easement	<ul style="list-style-type: none"> ▶ Erosion and sediment controls in place. ▶ APA to be contacted immediately if subsidence is observed.
Other	<ul style="list-style-type: none"> ▶ The use of rippers or horizontal directional drills is within the gas pipeline easement is prohibited unless otherwise agreed by APA.

OPERATION AND MAINTENANCE

7 SITE SPECIFIC EMERGENCY RESPONSE PLANS

The Solar Farm Service Manager is responsible for ensuring that specific emergency response plans that have been developed are reviewed for all potential emergencies that are considered to be reasonably possible as identified in the HSE Risk Assessment for the site. Wardens are inducted into the Site Emergency Response Plans by reviewing & amending if required and approving the documents. Chief Warden's / warden signatures on sign to Appendix A.4 (EPC Training register) is record of their approval. The plans shall be reviewed by the Wardens upon changes to the site HSE Risk Assessment.

An emergency response plan (ERP) will be required for all reasonably possible emergency situations Specific Emergency Response Plans are required for:

Site evacuation	<input checked="" type="checkbox"/>	Section 7.1	ERP 1
Bush fire	<input checked="" type="checkbox"/>	Section 7.2	ERP 2
Fire due to works	<input checked="" type="checkbox"/>	Section 7.3	ERP 3
Medical emergency	<input checked="" type="checkbox"/>	Section 7.4	ERP 4
Asset damage, underground / overhead	<input checked="" type="checkbox"/>	Section 7.5	ERP 5
Chemical or substance spill	<input checked="" type="checkbox"/>	Section 7.6	ERP 6
Electric shock LV / HV rescue	<input checked="" type="checkbox"/>	Section 7.7	ERP 7
Bomb threat	<input checked="" type="checkbox"/>	Section 7.8	ERP 8
Inclement weather	<input checked="" type="checkbox"/>	Section 7.9	ERP 9
Mobile plant, light & heavy vehicle emergency	<input checked="" type="checkbox"/>	Section 7.10	ERP 10
Confined Space emergency	<input checked="" type="checkbox"/>	Section 7.11	ERP 11
Poisonous animal bites	<input checked="" type="checkbox"/>	Section 7.12	ERP 12
EWP & working at a height emergency	<input checked="" type="checkbox"/>	Section 7.13	ERP 13
Lightning	<input checked="" type="checkbox"/>	Section 7.14	ERP 14
Trench / Excavation Collapse	<input checked="" type="checkbox"/>	Section 7.15	ERP 15
Other- Breach of high pressure gas pipelines	<input checked="" type="checkbox"/>	Section 7.16	ERP 16



OPERATION AND MAINTENANCE

7.1 ERP 1 SITE EVACUATION

In the event of an emergency requiring site evacuation at the site the following emergency evacuation protocols must be followed:

Under the direction of the Chief / Deputy Chief Warden the evacuation signal will be given by Sign on site, and/or 2 way radio, followed by the words Evacuate, Evacuate, Evacuate

- All work shall cease immediately and personnel shall make sure all members of their crew are aware that an emergency evacuation is in progress
- All personnel are to follow the instructions of the Warden and/or Supervisor in their area at all times
- Any mobility impaired personnel (or visitors) at site shall be assigned a warden to assist in evacuation (this also includes personnel on suitable duties)
- Turn off plant and machinery if possible and safe to do so
- Do not collect personal possessions
- Evacuate the area immediately via safe route communicated by Warden
- Leave in an orderly manner adhering to site rules and site road rules
- Assemble at designated Muster Point (refer maps in Appendix A.1) and participate in roll call
- First Aiders will bring portable first aid kit(s) to Provide first aid for any injuries and illnesses;
- All personnel shall remain at Emergency Evacuation Point until directed otherwise by Emergency Services or Wardens
- For total site evacuation (Bushfire etc.), personnel once roll called will make their way to their vehicles in an orderly manner and return to town via a determined safe route.

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

7.2 ERP 2 BUSH FIRE

The Chief Warden or delegate will monitor any radio broadcasts and Fires Near Me App or web based application local bushfire warnings. Bushfire warning advice may also be sought from the local fire authority. The Chief Warden will assess the location, direction and other conditions including warnings and advice given when determining the required response to bushfires that may impact the local area. The Chief Warden may also consult the Local Fire & Emergency Service and local Fire Danger Rating (FDR) when considering the response to a bushfire.

In the event of a bushfire in the area following will apply:

- The Chief Warden or delegate shall monitor the local radio station for community warning advice
- The Chief Warden will contact the local fire service for alarm and advice
- The Chief Warden will consider the information available to make an informed decision on whether to evacuate the site



OPERATION AND MAINTENANCE

Should the decision be made to evacuate the Chief warden will follow ERP 1 Site Evacuation. However once personnel are roll called they will make their way to their vehicles in an orderly manner and return to town via a determined safe route.

There are three levels of community warnings which can be issued as an event escalates. In the event of a grass/bush fire:

- Immediately raise the alarm on site as per **Section 3 Communication during an Emergency**
- Quickly assess the risk to you and others re; size, location and direction of fire
- Telephone the Fire and Rescue Service (000); advise the Fire and Rescue Service of the following:
Your name, Exact location, Point of entry, Type of fire, Where the fire is located

Statement:

Do NOT hang up until advised to do so by the operator and follow directions given by Warden regarding evacuation.

There are three levels of community warnings which can be issued as an event escalates. These include:

Advice – A fire has started. There is no immediate danger. Stay up to date in case the situation changes
Watch and Act - Watch And Act - There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect you and your family

Emergency Warning - An Emergency Warning is the highest level of Bush Fire Alert. You may be in danger and need to take action immediately. Any delay now puts your life at risk.
Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

The site emergency response team shall assist the emergency services as much as practicable if there is a fire in the vicinity of the site.

7.3 ERP 3 FIRE DUE TO WORKS

In the event of a site fire (as a result of works):

- Immediately raise the alarm (contact emergency services on Triple 000) on site as per **Section 3 Communication during an Emergency**
- **Follow the R.A.C.E. Procedure**
- **Rescue** - Rescue any people in immediate danger (only if it safe to do so)
- **Alarm** - Raise the alarm, call Triple Zero (000), notify staff member in charge
- **Contain** – If practicable, close all doors and windows to contain the fire (only if it safe to do so)
- **Extinguish** - Try to extinguish the fire using appropriate firefighting equipment only if you are trained and it is safe to do so
- **After carrying out RACE:**
- Follow the instructions of your Fire Wardens



OPERATION AND MAINTENANCE

- Prepare to evacuate if necessary
 - Leave the lights on
 - Save records if possible
- If you or others are considered to be in danger evacuate to safe location (Muster Point)
- Follow directions given by Chief Warden or Warden.

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

7.4 ERP 4 MEDICAL EMERGENCY

7.4.1 IF PATIENT IS UNCONSCIOUS

Where the patient is unconscious during a medical emergency the following steps are to take place:

- Immediately raise the alarm via 2-way radio, word-of-mouth or Mobile Phone for first aid assistance.
- Apply DRABCD (Danger, Response, Airways, Breathing, CPR, Defibrillator)
- Call ambulance service if required on 000
- Apply initial First Aid if required and trained

7.4.2 IF PATIENT IS CONSCIOUS

Where the patient is conscious during a medical emergency the following steps are to take place:

- Immediately raise the alarm via 2-way radio, word-of-mouth or Mobile Phone
- Apply DRABCD
- Stay and reassure the patient
- Apply initial First Aid if required and trained
- If Further Treatment is required
- Evaluate nature and extent of injuries
- Arrange for attendance by an ambulance to site (000)

Advise ambulance service of the following:

- Your name, Exact location, Point of entry, Nature of injuries (if known), Where the patient is located
- Do NOT hang up until advised to do so by the operator

7.4.3 IF FURTHER TREATMENT IS REQUIRED

- Evaluate nature and extent of injuries



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

- Arrange for attendance by an ambulance to site (000)
- Advise ambulance service of the following

Advise ambulance service of the following:

- Your name, Exact location, Point of entry, Nature of injuries (if known), Where the patient is located.
- Do NOT hang up until advised to do so by the operator

7.4.4 DRABCD

- **Danger** – Check for dangers. Approach with care and do not put yourself in danger. If the person is in a hazardous area, it is okay to move them (only if there is no danger to oneself) as gently as possible to protect both your and their safety
- **Response** – Check if the person is conscious or unconscious. Touch and talk to them (COWS – Can you hear me, Open your eyes, what is your name, Squeeze my hands). If they don't respond they are unconscious.
- **Airway** – The airway must be protected, inspect for obstructions, if obstructions found roll them into the recovery position, being aware that their neck may be injured and needs to be stabilised whilst they are being rolled.
- **Breathing** – Once on their side check that the mouth is clear of any obstructions such as blood or vomit and make sure that they are breathing.
- **CPR** – Provide chest compressions to 1/3 depth of chest at a ratio of 30 compressions: 2 Breaths aiming for 100 compressions and no more than eight breaths per minute
- **Defibrillation** – Apply an AED as soon as possible if person is:
 - Unconscious and not breathing normally

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

7.5 ERP 5 ASSET DAMAGE, UNDERGROUND / OVERHEAD

Damage to or Failure of Services (power, water, gas etc.)

- Immediately raise the alarm on site as per **Section 3 Communication during an Emergency**.
- Assess the hazards to ensure you or others are not in danger
- Consider STEP / Touch potential (stay in the cab of a vehicle with insulated tyres if struck live overhead powerline until power is turned off, or jump free), shuffle / hop with both feet if live cable in close proximity on the ground



OPERATION AND MAINTENANCE

- If you or others are considered to be in danger evacuate to safe location
- Turn off plant and machinery if possible and safe to do so
- Proceed to designated Muster Point in an orderly manner following site and road rules and participate in roll call
- All personnel are to follow the instructions of the Warden and/or Supervisor in their area at all times
- Chief Warden shall notify the relevant Emergency Services and Client representative
- Warden shall close off entry to affected area to a point considered safe as directed by Chief Warden and await further instructions
- Chief Warden shall notify security of arrival of Emergency Services
- Chief Warden may direct a Warden to meet and escort emergency services to safe point on route to area of incident
- Wardens shall follow directions given by emergency services once they arrive

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

7.6 ERP 6 CHEMICAL OR SUBSTANCE SPILL

In the event of a significant chemical or Substance spill. See 10.1.2 Solar Farm Compound or 10.1.3 Substation layout for location of Spill Kits.

- Personnel in vicinity to clear the area, move upwind if safe and assess immediate dangers
- Check for any personnel involved and remove from danger (if safe to do so)
- Remove contaminated clothing and douse with water
- Call emergency Services (000) and give details of incident
- Immediately raise the alarm on site as per **Section 3 Communication during an Emergency.**
- Notify Warden of location, type and size of spill
- Prevent access to area by others until ECO members or Emergency Services arrive
- Follow directions from ECO members or Emergency Services

In the event of a minor chemical or substance spill onsite:

- If there is no danger to yourself or others
- Notify your Supervisor who will notify a Warden of location, type and size of spill
- Follow directions from Warden and advise of your intention regarding containment
- Choose appropriate personal protection equipment as per SDS
- Isolate the spill area and remove any ignition sources if possible



OPERATION AND MAINTENANCE

- Confine and contain the spill (if safe to do so)
- Remain upwind at spill site if safe to do so until ECO members arrive

Spill clean-up Reporting:

- For a major spill, call 000 to report it immediately to emergency services.
- For all other incidents contact the NSW Environment Protection Authority (EPA) at any time:
- By phone: 131 555
- By email: info@environment.nsw.gov.au
- Anyone engaged in the activity resulting in the pollution incident has a duty to report the incident. Whoever occupies land where a pollution incident occurs must also report it. Failure to do so is an offence and carries a fine.

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

7.7 ERP 7 ELECTRIC SHOCK LV / HV RESCUE

In the event of a Low Voltage Electrical Shock the rescuer(s) shall:

- Assess the hazards to ensure you or others are not in danger
- If you or others are considered to be in danger evacuate to safe location
- Call emergency Services (000) and give details of incident
- Raise the alarm
- Prevent access to area by others until ECO members or Emergency Services arrive

If rescuers are not in danger themselves they should (if trained in Low Voltage rescue):

- Isolate the source of electricity
- If the source of electricity cannot be isolated
- Immediately raise the alarm on site as per **Section 3 Communication during an Emergency.**
- separate the victim from the source of electricity by using an insulated crook if trained in Low Voltage rescue

If a crook is not available, use dry wood or plastic object, strong and long enough to prevent danger to the rescuer (if there is any doubt DO NOT USE)

- Move victim away from danger
- Apply DRABCD process
- If victim begins breathing place in recovery position and monitor until help arrives



OPERATION AND MAINTENANCE

- Assist ECO members or Emergency services when they arrive

In the event of a High Voltage Electrical Incident:

- Assess the hazards to ensure you or others are not in danger
- If you or others are considered to be in danger evacuate to safe location
- Isolate electrical supply in accordance with operating procedures
- Call emergency Services (000) and give details of incident
- Immediately raise the alarm on site
- Prevent access to area by others until ECO members, or Emergency Services arrive

Note details about the incident to inform emergency services

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

7.8 ERP 8 BOMB THREAT

Bomb incident procedures have four essential elements:

THREAT

Written Threat – If a bomb threat is received in writing, it should be kept, including any envelope or container. Once a message is recognised as a bomb threat, avoid further unnecessary handling. Every possible effort must be made to retain evidence such as possible fingerprints, handwriting or typewriting. Evidence should be protected by placing it in a protective envelope (plastic) and the Chief Warden notified immediately.

Telephone Threat – An accurate analysis of the telephone threat can provide valuable information on which to base recommendations, action and subsequent investigation. The person receiving the bomb threat by telephone should not disconnect the call and, as soon as possible, complete the information required on a Bomb Threat Check List. A Bomb Threat Check List should be readily available to administration personnel at site.

Suspect Object – A suspect object is any object found on the premises and deemed a possible threat by virtue of its characteristics, location and circumstances.

EVALUATION

Following an analysis of information received, the Chief Warden should categorise the bomb threat, which may be either specific or non-specific as follows:



OPERATION AND MAINTENANCE

Specific Threat – In this case the caller will provide more detailed information that could include statements describing the device, why it was placed, its location, the time of activation and other details. Although less common, the specific threat is the most credible.

Non-specific threat – In this instance an individual may make a simple statement to the effect that a device has been placed. Generally, very little, if any, additional detail is conveyed before the caller terminates the conversation. The non-specific threat is the more common, but neither can be immediately discredited without investigation. In other words, every threat must be treated as genuine until proven otherwise.

Evaluation involves assessing one of four possible alternatives:

- Take no further action
- Search without evacuation
- Evacuate and search
- Evacuate without search

Each of these options will have advantages and disadvantages related to safety, speed of search, thoroughness, productivity and morale, and must be assessed against the potential risk. All bomb incidents are to be reported to Emergency Services (Police). A decision may be taken by a Commissioned Officer of the Police Services to declare an emergency situation and take control under the Public Safety Preservation Act 1986-2016.

SEARCH

Those best qualified to carry out a thorough search in any given area are the occupants. The occupants have knowledge and a better understanding of “WHAT BELONGS” or “WHAT DOES NOT BELONG” in a location at any given time. Generally speaking, law enforcement authorities do not possess intimate knowledge of the threat area, although prepared to assist occupants, would be less likely to recognise what could be suspect.

The aim of the search is to identify any object that is not normally to be found in the threat area, or for which an owner is not readily identifiable, or becomes suspect for any other reason. For example, a suspiciously labelled parcel similar to that described in the threat – or of unusual size or shape – notice should also be taken of the presence of pieces of tape, wire, string or explosive wrappings and the like.

If the decision to evacuate and a search made, all personnel should if requested, remove all personal belongings such as handbags, carry bags, brief cases, shopping bags or any other item which may be mistaken for a bomb. This will facilitate the identification of suspect objects. Personnel shall follow the direction of the Chief Warden, Wardens or Emergency Services regarding evacuation.

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.



OPERATION AND MAINTENANCE

7.9 ERP 9 INCLEMENT WEATHER

In the event of adverse weather, very high winds, electrical storms, flooding the following will apply:

- The Chief Warden will issue weather warnings (e.g. severe storm, high winds, dust storm, flooding) via 2-way radio (channel 14), word-of-mouth or Mobile Phone, SignOnSite Mobile phone application
- The Chief Warden or delegate shall continue to monitor the weather via the BOM website and provide regular updates
- As the weather threat escalates the Chief Warden will communicate the required actions which may include:
 - Securing equipment and materials from high winds
 - Securing cranes and mobile plant
 - Ceasing works in exposed areas, Personnel proceeding to sheltered areas (lunch rooms and administration buildings)
- The Wardens will conduct a roll call when at sheltered areas and report result to the Chief Warden
- The Chief Warden shall determine if an evacuation is required due to the expected severity of the event
- In the event of high rainfall that could affect the safe travel to or from site appropriate action shall be decided by the Solar Farm Site Manager
- Road closures due to flooding are broadcast over Local FM Radio channel

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

7.10 ERP 10 MOBILE PLANT, LIGHT VEHICLE & HEAVY VEHICLE EMERGENCY

In the event of roll-over/collapse or collision of Mobile Plant or Heavy Vehicle on site the following shall apply:

- Assess the hazards to ensure you or others are not in danger
- If you or others are considered to be in danger evacuate to safe location
- Call emergency Services (000) and give details of incident
- Raise the alarm as per the relevant sub-section of **Section 3 Communication During an Emergency.**
- Advise Chief Warden of Emergency Services notification
- Wardens to commence Evacuation if directed by Emergency Services or Chief Warden and follow Evacuation process



OPERATION AND MAINTENANCE

- If no evacuation is initiated by Chief Warden or Emergency Services
- Prevent access to area by others until ECO members or Emergency Services arrive
- Emergency Services to give all clear if in attendance
- If personnel not involved in incident are not in danger themselves they should
- Isolate ignition/power/hydraulic systems and secure plant
- If damaged plant is considered stable and poses no danger to personnel remove any injured personnel from danger (if considered safe to move)
- Raise the alarm as per the relevant sub-section of **Section 4 Communication During an Emergency**.
- Administer first Aid (if trained) and reassure patient(s) until ECO members or Emergency Services arrive; Assist ECO members if requested
- Follow directions from Warden
- Once medical emergency is controlled Wardens shall secure scene and relocate personnel as directed by Chief Warden
- Wardens are to control any Chemical spill as per Section 3.4 Chemical or Substance Spill
- Access to secured area shall be by direction or approval of Chief Warden

Note: If an urgent medical transfer via air evacuation is required, this will be coordinated by the Emergency Services in attendance.

Reporting:

Refer to **Section 2** for **Site Emergency Response Team (ERT)**.

Refer to **Section 3** **Communication during an Emergency**.

Refer to **Section 4** **External Emergency Contacts**.

7.11 ERP 11 CONFINED SPACE EMERGENCY

In the event of a Confined Space Emergency (Incident) the following shall apply; the designated Stand-by person shall not enter the confined space, but will immediately:

- Assess the hazards to ensure they or others are not in danger
- Raise the alarm as per the relevant sub-section of **Section 3 Communication During an Emergency**.
- Contact the Chief Warden to advise of Emergency services notification and give a brief description of the emergency/incident
- The Chief Warden shall make an assessment of the situation and determine the on-site response of Wardens and First Aid Officers etc.



OPERATION AND MAINTENANCE

- The Chief Warden shall follow the on-site rescue procedures stated on the “Confined Space Rescue Plan” (See Section 6 ERP’s INCIDENT RESPONSE GUIDES) when directing suitably trained personnel

Workers performing rescue must be adequately trained and have CURRENT Confined space training.

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

7.12 ERP 12 POISONOUS ANIMAL BITES

Once an incident has occurred, the injured person or first responder will need to respond effectively and if required assist the victim(s) as quickly as possible. This must be done without placing themselves or the victim(s) in further danger:

- Assess the hazards to ensure you or others are not in danger
- If you or others are considered to be in danger evacuate to safe location
- Call emergency Services (000) and give details of incident
- Raise the alarm as per **Section 3 Communication during an Emergency.**
- Prevent access to area by others until ECO members or Emergency Services arrive

Snake bite response (do’s):

- If you or someone you know has been bitten, try to remember the colour and shape of the snake, which can help with treating the snakebite
- Raise the alarm and request first aid assistance
- Keep the victim still and calm. This can slow down the spread of venom if the snake is poisonous
- Seek medical attention immediately by phoning 000, requesting the ambulance or phone the poison hotline 13 11 26
- Calmly and clearly speak to the operator and describe the nature of the incident i.e. the type of animal involved for example; tiger snake, brown snake etc.
- Apply first aid if you cannot get the person to the hospital right away
- Lay or sit the person down and ensure that the bite location is below the heart level
- Cover the bite with a clean, dry dressing

Snake bite response (don’t):

- Do not pick up the snake or try to trap it as it may put you or someone else at risk for another venomous bite
- Do not apply a tourniquet



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

- Do not attempt to suck out the venom
- Do not apply ice or immerse the wound in water
- Do not drink alcohol as a painkiller
- Do not drink caffeinated beverages

Spider bite response:

- Stay calm, identify the type of spider if it is possible to do so safely as identification will aid in medical treatment
- Raise the alarm and request first aid assistance
- Wash the afflicted area with anti-bacterial soap and water
- Apply a cloth dampened with cold water or filled with ice to reduce swelling
- Elevate the bite area, if possible and do not attempt to remove venom
- Seek medical attention immediately by phoning 000, requesting the ambulance or phone the poison hotline 13 11 26
- Calmly and clearly speak to the operator and describe the nature of the incident i.e. the type of animal involved for example; red back spider, funnel web, etc.

All non-essential personnel are to remain clear of the area

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

7.13 ERP 13 ELEVATED WORK PLATFORM (EWP) AND WORKING FROM HEIGHT RESCUE

Once an incident has occurred, the first responder will need to respond effectively and if required assist the victim(s) as quickly as possible. This must be done without placing themselves or the victim(s) in further danger.

The following steps form the general procedures and precautions to be taken:

- Raise the alarm and request first aid and/or assistance from emergency services if required

In the event of a fall from a EWP the following procedure shall be adapted:

- The ground staff member will take control of the situation. They will make verbal contact with fallen person to ask of their condition and wellbeing
- When ground staff person decides the fallen person is in a stable condition they will instruct the fallen person of the following sequence of events to perform successful rescue



OPERATION AND MAINTENANCE

- Using machine base controls, they will proceed to lower fallen person to ground in a steady and smooth manner being sure to avoid all obstacles beneath the basket
- After the person has been successfully lowered to ground, first aid can be administered according to severity of incident
- In the event of the person not being able to be successfully lowered to ground because of obstacles, other machinery is available on site to assist including but not limited to trucks, backhoes, mobile cranes etc.

In the event EWP is stuck and fallen person cannot be lowered:

Use nearby plant or structure to take the weight of the person until emergency team arrives. The person is to be kept in a seated position until emergency services arrive. Suspension time is to be monitored. After the person has been successfully lowered to ground, first aid can be administered.

In the event of EWP engine failure / loss of controls or the operator is incapacitated:

- The ground staff member shall revert the EWP controls to the machine base controls
- The ground staff member shall lower the basket in a safe manner
- Should both controls be ineffective, or the EWP engine has stopped, the ground staff member shall lower the basket via the emergency hydraulic decent valve or the battery override system
- For incapacitated workers, initiate appropriate emergency response with regard to the nature of incapacitation

The Solar Farm Site Manager shall then declare the EWP out of service and tag out accordingly.

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

7.14 ERP 14 LIGHTNING

In the event The Chief Warden shall monitor an approaching lightning event on the BOM website;
www.bom.gov.au:

- The Chief Warden will issue lightning warnings via 2-way radio channel (14), word-of-mouth or mobile phone
- The Chief Warden shall continue to monitor the lightning strike area via the BOM website and provide regular updates
- As the threat of a lightning event at site escalates the Chief Warden will communicate the required actions
- When lightning is detected at 15km the Chief Warden shall cease outdoor activities and request employees and subcontractors to secure materials, plant and equipment



OPERATION AND MAINTENANCE

- Personnel not occupied with securing equipment are to proceed to sheltered areas (lunch rooms and administration buildings)

When lightning is detected, reported by field personnel or visibly observed the Chief Warden shall:

- Instruct personnel to abandon securing materials, plant and equipment if not completed
- Instruct Wardens to direct all remaining personnel to immediately proceed to sheltered areas (lunch rooms and administration buildings)
 - The Wardens will conduct a roll call when at sheltered areas and report result to the Chief Warden

Personnel must remain in the sheltered areas until an authority to recommence work is received from the Chief Warden.

Note: If personnel witness a lightning strike and the time between seeing the flash and hearing thunder is less than 30 seconds, they should immediately head for shelter.

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

7.15 ERP 15 TRENCH / EXCAVATION COLLAPSE

Once an incident has occurred, the first responder will need to respond effectively and if required assist the victim(s) as quickly as possible. This must be done without placing themselves or the victim(s) in further danger.

The following steps form the general procedures and precautions to be taken:

- Raise the alarm and request first aid and/or assistance from emergency services if required
- Instruct someone to meet emergency services at the entrance to the site and guide them to the scene of the incident
- Locate the section of the collapsed trench/excavation the trapped person is in. (Look for evidence e.g. tool, safety helmet etc. etc.)
- Identify if any further collapse is likely (Look for cracks in sides etc.)
- Do not allow any personnel into trench/excavation until it has been made safe
- If possible carefully batter the sides of the trench/excavation in the collapsed area to prevent further collapse
- If possible, install shields/shoring to protect the trapped person and rescuers
- When trench/excavation is deemed safe to enter, rescue operation can proceed
- Carefully remove collapsed soil by shovel. Try to avoid standing on top of the collapsed soil. The trapped person may be underneath



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

- When the digging is close to the trapped person continue excavation by hand. If shovels are required extreme care must be taken not to cause further injury to the trapped person
- When the trapped person is located, clear soil from around the head and chest areas. Check for breathing and a pulse
- If breathing has stopped and no pulse is present commence C.P.R. and continue until emergency services arrive and take over
- Once the trapped person has been freed, treated and stabilised by emergency services, make arrangements for the person to be removed from the trench/excavation in a safe manner, ensuring no further collapse occurs

All non-essential personnel are to remain clear of the trench/excavation. Under no circumstances is anyone to enter the trench / excavation except for personnel involved in the rescue operation

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.



OPERATION AND MAINTENANCE

7.16 ERP 16 BREACH OF HIGH PRESSURE GAS PIPELINE

There is a 20 m wide high pressure gas pipeline easement through the site containing two high pressure gas pipelines (owned and operated by APA). The location of the easement is shown in on the plans in Appendix A.1.

Once a breach has occurred, the first responder will need to respond effectively and if required assist the victim(s) as quickly as possible. This must be done without placing themselves or the victim(s) in further danger.

The following steps form the general procedures and precautions to be taken:

- Raise the alarm and request first aid and/or assistance from emergency services if required
- Instruct someone to meet emergency services at the entrance to the site and guide them to the scene of the incident
- Evacuate the area immediately surrounding any gas escape without using a vehicle or any device that may create a spark, including a mobile phone

For a major incident, where there is risk to life or property, call 000.

- Call the relevant emergency number below if:
 - ❖ you can smell gas
 - ❖ you can hear gas escaping
 - ❖ there has been a gas explosion or fire
 - ❖ you are aware of, or may have caused damage to a gas pipe, meter or pipeline
- Please report all damage, no matter how minor.

Important

- Do not use a naked flame or other ignition source to look for a gas leak
- Do not create sparks by using a vehicle, electronic devices (mobile phones, tablets, cameras, etc.), matches or lighters, or smoking

Gas Emergency Contact Numbers

- **High Pressure Natural Gas Transmission Pipelines - 1800 017 000**

Reporting:

Refer to Section 2 for Site Emergency Response Team (ERT).

Refer to Section 3 Communication during an Emergency.

Refer to Section 4 External Emergency Contacts.

OPERATION AND MAINTENANCE

7.17 EMERGENCY PRACTICE DRILLS

The Solar Farm Site Manager is responsible for organising scenario based emergency practice drills which test a variety of identified potential emergency situations listed in the Table above. Drills are to be scheduled and conducted within 6 weeks of completion of site commissioning and then every 6 months during operation and maintenance.

Emergency practice drills are to be evaluated for effectiveness and recorded in Cintellate via the emergency practice drill audit form. Corrective actions associated with the emergency practice drill are to be raised in Cintellate for follow up and close out.

Cintellate emergency practice drill audit form (located in audit module on Cintellate)



Site Evacuation Observation Report Form

General Site Safety Inspection form

7.17.1 SCHEDULE FOR EMERGENCY RESPONSE DRILLS

Type	Location of Test	Testing Frequency / Date	Person(s) Responsible
<p>To be selected from one of the potential emergency scenarios, such as:</p> <ul style="list-style-type: none"> • Fire / Medical Emergency • Service Damage (HV, gas pipeline) • Chemical spill • LV Rescue 	Solar farm / Designated area of solar farm	Within 6 weeks of commencement of operation and maintenance activities and there after every 6 months	Solar Farm Site Manager

OPERATION AND MAINTENANCE

8 SITE DOCUMENTATION AND WORK INSTRUCTIONS

Document List	Location
Site Evacuation Report Form	HSE Hub PM tile
Debrief Record	HSE Hub PM tile
Project First Aid and Fire Assessment	HSE Hub PM tile
First Aid Inspection Checklist	HSE Hub PM tile
First aid Kit Contents List and Audit Form	HSE Hub PM tile
First Aid procedure	HSE Hub PM tile
Project first Aiders List	HSE Hub PM tile
Emergency management procedure	HSE Hub PM tile
Emergency Contacts HSE Boards	HSE Hub PM tile
Emergency Warden Template	HSE Hub PM tile
Firefighting equipment register	HSE Hub PM tile
Personnel Emergency Evacuation Plan PEEP	HSE Hub PM tile
Fire Warden ECO training Pack	HSE Hub PM tile
EPC Committee Agenda	HSE Hub PM tile

OPERATION AND MAINTENANCE

8.1 LEGISLATION AND STANDARDS

The following manuals and references are used to provide a safe system of work for all workers and contractors. These requirements are a minimum standard and shall not be compromised under any circumstances.

LEGISLATION

- ▶ Work Health and Safety Act 2011 No 10
- ▶ Work Health and Safety Regulation 2017

CODES OF PRACTICE

- ▶ WorkCover NSW Construction work (Code Of Practice August 2019)
- ▶ SafeWork NSW Confined spaces (Code Of Practice August 2019)
- ▶ WorkCover NSW First aid in the workplace (Code Of Practice August 2019)
- ▶ WorkCover NSW Managing risks of hazardous chemicals in the workplace (Code Of Practice July 2014)
- ▶ SafeWork NSW Hazardous manual tasks (Code Of Practice August 2019)
- ▶ WorkCover NSW Managing the risks of plant in the workplace (Code Of Practice August 2019)
- ▶ SafeWork NSW Managing the risks of falls at workplaces (Code Of Practice August 2019)
- ▶ WorkCover NSW Excavation work (Code Of Practice August 2019)
- ▶ WorkCover NSW Managing the work environment and facilities (Code Of Practice August 2019)
- ▶ National Construction Code of Australia

National Legislation

- ▶ Safe Work Australia Code of Practice for Confined Spaces
- ▶ Safe Work Australia Code of Practice for Construction Work
- ▶ Safe Work Australia Code of Practice for Control of Hazardous Substances
- ▶ Safe Work Australia Code of Practice for Excavation Work
- ▶ Safe Work Australia Code of Practice for First Aid in the Workplace
- ▶ Safe Work Australia Code of Practice for Hazardous Manual Tasks
- ▶ Safe Work Australia Code of Practice for How to Manage and Control Asbestos
- ▶ Safe Work Australia Code of Practice for Managing Electrical Risks in the Workplace
- ▶ Safe Work Australia Code of Practice for Managing Noise and Preventing Hearing Loss at Work
- ▶ Safe Work Australia Code of Practice for Managing the Risk of Falls in the Workplace
- ▶ Safe Work Australia Code of Practice for Managing the Risk of Plant in the Workplace
- ▶ Safe Work Australia Code of Practice for Managing the Work Environment and Facilities
- ▶ Safe Work Australia Code of Practice for Safe Design of Structures
- ▶ Safe Work Australia Code of Practice for Work Health and Safety Consultation and Coordination

AUSTRALIAN STANDARDS

- ▶ AS 3745-Planning for Emergencies in Facilities



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

- ▶ AS 3745-2002 Emergency control organization and procedures for buildings, structures and workplaces
- ▶ AS 2444-2001 Portable Fire Extinguishers & Fire Blankets – Selection & Location
- ▶ AS 1851-2012 Routine Service of Fire Protection Systems and Equipment

ORGANISATIONAL DOCUMENTS

- ▶ Refer to the HSE Hub for current versions of all organisational document

APPENDICES

A.1 **EMERGENCY EVACUATION PLANS (MAPS)**

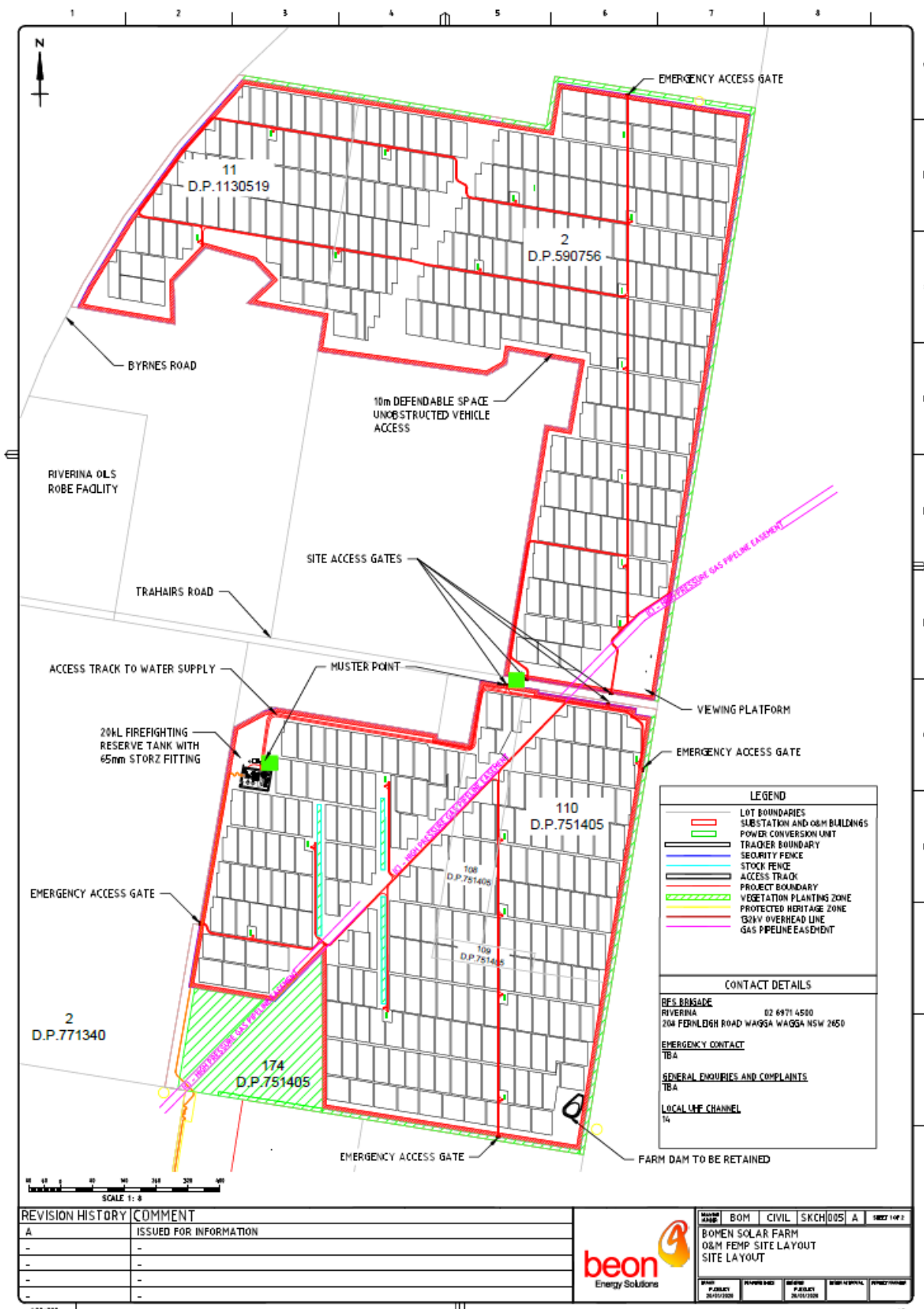
Refer to maps on following pages.



NEVER COMPROMISE
health & safety

FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

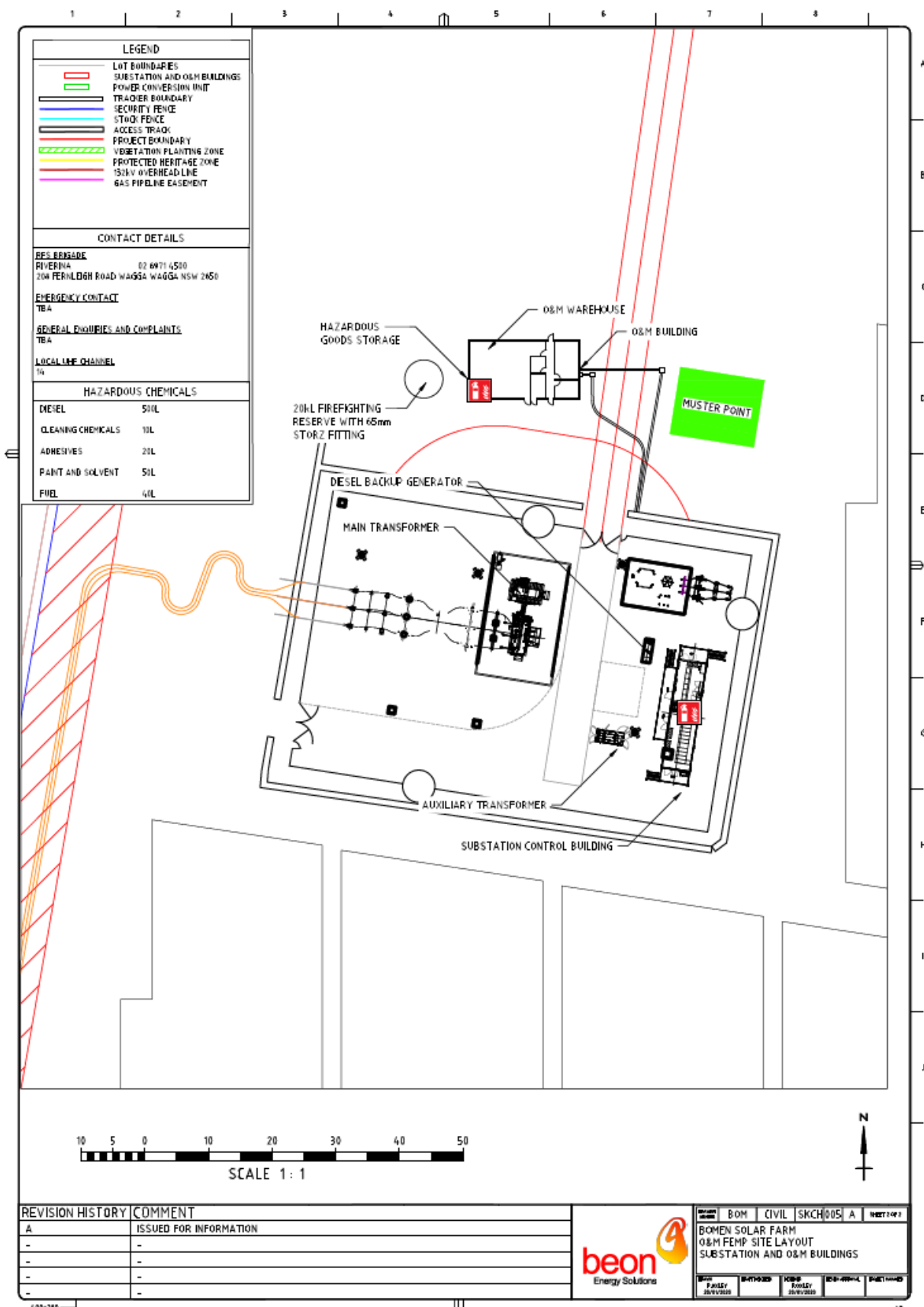




NEVER COMPROMISE
health & safety

FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE





A.2 SITE EVACUATION OBSERVATION REPORT FORM

Site Evacuation Report

Note: Records of drill or planned Emergency Evacuations are to be entered into Cintellate

This form is to be used to record occasions when Site Emergencies are activated, including drill or planned Emergency Evacuations. The report is to be completed by either:

- Site Emergency Coordinator or Site Manager.

Site Details

Site

Date/Time

Occupancy Level

Type of evacuation: Drill/Fire/Alarm/Live Emergency

Nature of Emergency

Incident Reported by:

Reported to:

Assembly Area(s):



OPERATION AND MAINTENANCE

Conduct of Evacuation

Site Emergency Coordinator Actions	Yes	No	Time	NA
Incident/Emergency Situation Reported to Security or 000?				
Contractors log checked to identify if contractors need to be specifically advised?				
Emergency Services contact confirmed?				
Personnel in immediate danger removed from point of origin?				
Safe egress and assembly areas determined?				
Point of origin location closed off and contained				
Full evacuation initiated?				
Any action on fire (use of extinguishers)?				
Did someone direct Emergency Services to the building?				
Was a site search required/undertaken to find personnel who had not evacuated?				
Was the evacuation orderly?				
Did all evacuees go to the nominated Evacuation Point?				
Was power/gas isolation required? Was this completed?				
Were external exits controlled?				
Was permission to re-enter the site/building given by Emergency Services before re-entry?				

Operation of Site Emergency Equipment

Item	Yes	No
Could the emergency alarm be heard throughout the site?		
Was all Emergency Procedure signage in place?		



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

General Information

Did Emergency Services attend?

Yes/No

Approximate total number of personnel evacuated?

Main assembly area used?

Time incident commenced?

Time re-entry allowed?

Did any building occupants fail to evacuate when instructed? If so, which area?

Other Comments

Debriefing: Not Required/Planned for:

Improvement Action Plan

Action taken/recommended	Person responsible	Timeframe

Site Emergency Coordinator

Signature:

Date

FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

A.3 **SOLAR FARM COMPOUND VEHICLE MOVEMENT PLAN**

NOT APPLICABLE FOR OPERATION AND MAINTENANCE DUE TO SMALL VOLUME OF LIGHT VEHICLES ON SITE (e.g. 2 x light vehicles) AND LACK OF MOBILE PLANT.



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

A.4 EMERGENCY PLANNING COMMITTEE TRAINING REGISTER

Table of personnel trained in the requirements of this Fire & Emergency Management Plan .

It is acknowledged that I being one of the people in the table below have been trained in the requirements of this FEMP.

It is acknowledged that I being a Chief warden, Deputy Chief warden have reviewed and sign off on the contents of the Site Specific Emergency Response Plans listed under section 7 ERP 1- 16

Full Name Print	Signature	ECO Role	Date
SOLAR FARM, COLLECTOR STATION AND 132kV LINE			
Solar Farm Site Manager		Chief Warden	
Solar Farm Technician 1		1st Deputy Chief Warden	
Solar Farm Technician 2		2nd Deputy Chief Warden	
Solar Farm Technician 3		Warden	
Solar Farm Technicians 1, 2 and 3		First Aider	



A.5 EMERGENCY PLANNING COMMITTEE (EPC) MEETING AGENDA

Site name:

MEETING DATE/TIME:

COMMITTEE MEMBERS: List

1. **Attendees / Apologies** Chair
2. **Confirmation of previous minutes** Chair
3. **Review Actions Register** Chair
 - Should include actions arising from previous meeting
4. **Correspondence** Chair
 - Include relevant Audit reports
5. **Emergency Evacuations** All
 - Schedule trial evacuations (to be held within 6 weeks of site mobilisation) and at least annually thereafter)
 - Post-trial Emergency Evacuation review meeting and meeting minutes
 - Note time taken for evacuation from start of siren to CW notification of evacuation completion.
6. **Emergency Team (Warden and Deputy) Review** Chair
 - Ensure appropriate numbers and cover short-term absences/after-hours situations
 - Warden identification apparel appropriate
7. **Training Review – adequacy of training for roles** Chair
 - -Refresher training (including fire extinguisher use) – minimum every 3 years
 - -Include Warden and Deputies, EPC member training and other awareness training
 - -Ensure that all training records is retained by the CW and entered into SAP
8. **Emergency/Evacuation Guideline and Plan Review** Chair
 - Determine any corrective actions required
(refer 1.3 local Emergency/Evacuation Guidelines for requirements)
9. **H&S Noticeboard Review** Chair
 - Warden and deputy names/telephone numbers listed on Form 14-35-F0002
 - Site Map displayed
10. **Emergency Equipment Review** Chair
 - Ensure risk assessments are carried out to determine equipment compliance
 - Maintenance of portable fire appliance register review
(refer 1.3 local Emergency/Evacuation Guidelines for requirements)
 - Adequacy/maintenance of spill kits/absorbent material, PPE, signage, emergency showers and the Communications system
11. **General Business** All
 - (include review of meeting and adequacy of committee structure)
12. **Next Meeting** (to be held every 12 months or when location changes occur) Chair

Note: All actions from this meeting should be included on the local Actions Register

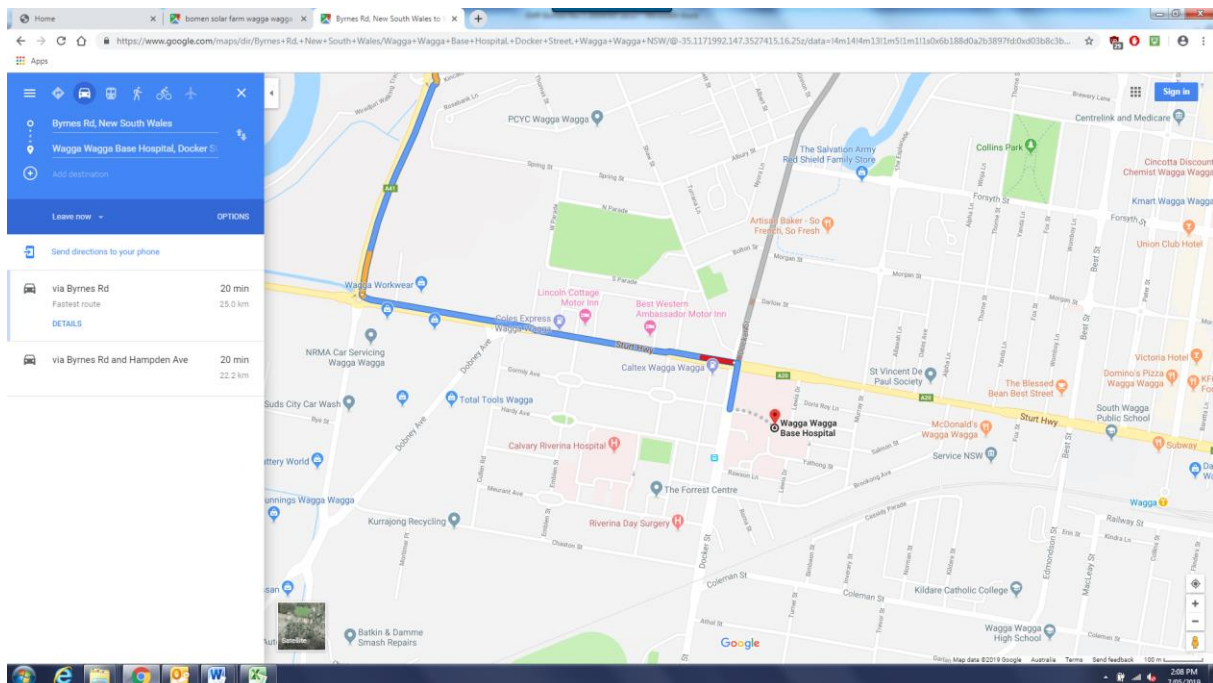
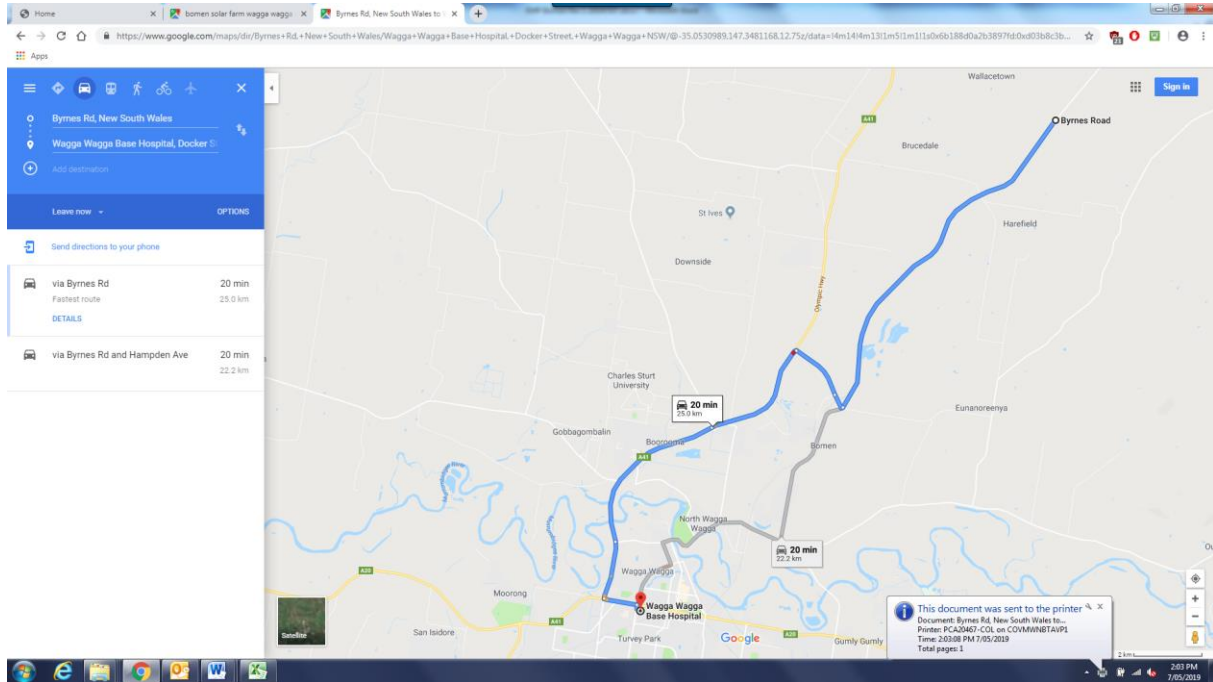


FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

A.6 ROUTE TO HOSPITAL FACILITIES

Wagga Wagga: Base Hospital. Docker Street. (02) 5943 1000

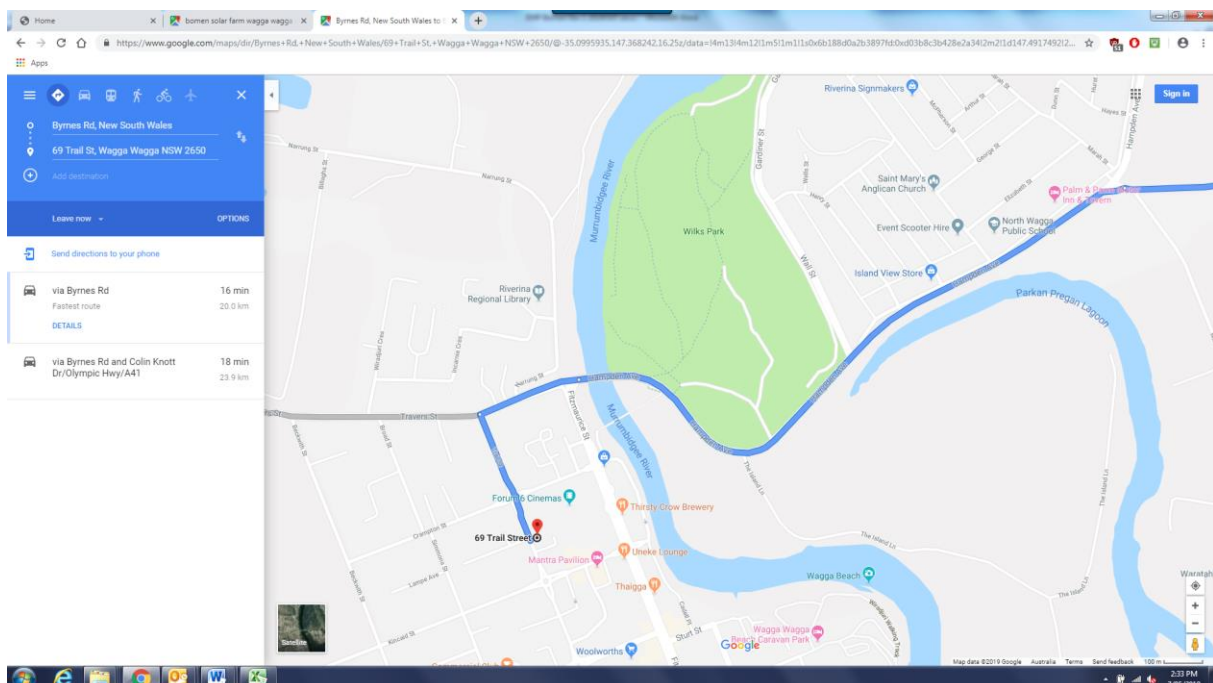
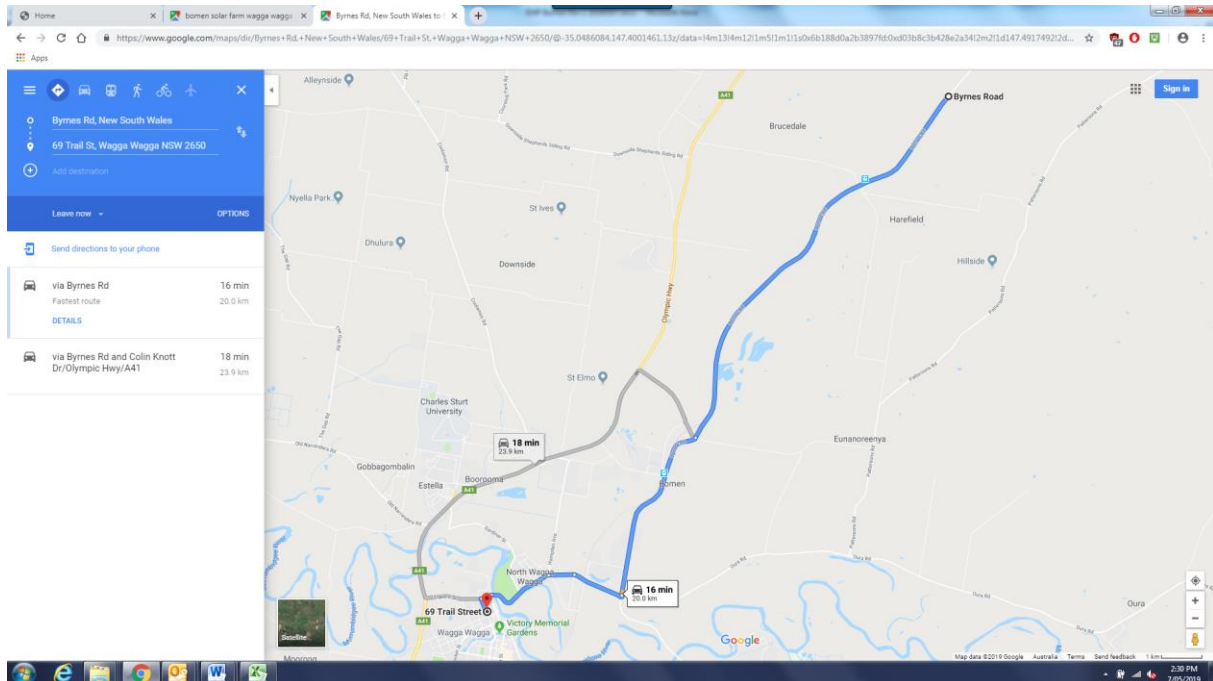


FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

A.7 ROUTE TO MEDICAL FACILITIES

Trail Street Medical Centre: 69 Trail Street Wagga Wagga. (02) 6921 3990





FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

A.8 PERSONAL EVACUATION EMERGENCY PLANS (PEEPS)

Occupant's Name: _____

Site Name: _____ **Location:** _____

Office Building / Facility: _____

Room Number: _____

I require assistance to evacuate in an emergency due to: *(Please circle)*

- Disability / Mobility Impairment
- Illness _____
- Pregnancy
- Other reason _____

Is an Assistance Animal involved? Yes ☐ No ☐

Are you trained in the emergency response procedures – including the evacuation procedures?

Yes ☐ No ☐

Preferred method of receiving updates to the emergency procedures: *(Please state –e.g. text, email, letter, Braille etc.)*

Preferred method of Notification of Emergency: *(Please state – e.g. visual alarm, personal vibrating device, SMS etc.)*

Type of assistance required: *(Please list or attach procedures necessary for assistance)*

Any additional equipment required for evacuation?

My personal emergency egress procedure is to: *(Insert step by step details)*

1. _____
2. _____
3. _____



FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

4. _____

My designated assistants in an emergency are: *(Please list names, contact details –phone, email, mobile phone number etc.)*

Are your designated assistants trained in and familiar with the emergency response and evacuation procedures?

Yes ☐ No ☐

Are your designated assistants trained in the provided evacuation equipment?

Yes ☐ No ☐

Diagram of preferred route for assisted evacuation: *(Please sketch or attach diagram)*

Note: If your current condition changes at any time that you no longer require assistance in an emergency – please notify the Emergency Coordinator, Chief Warden as soon as possible.

Occupant (approved) _____ Date _____

Emergency Coordinator _____ Date _____



NEVER COMPROMISE
health & safety

FIRE & EMERGENCY MANAGEMENT PLAN

OPERATION AND MAINTENANCE

