PR POWER

PLANT HAZARD IDENTIFICATION & RISK ASSESSMENT

PR-ECO LED LIGHTING TOWER

Company Name: PR Power Pty Ltd
Address: 41 Production Ave, Molendinar QLD 4214

Registration:
PRA NO.: 01
Issue Date: 08/08/2023
Review Date:

Plant Item: Lighting Tower – PR-ECO **Model:** LED 6x160W **Chassis/VIN:** **Engine Number:**

Stock Number: **Assessment Purpose:** **Owner:** PR Power

Assessment Conducted by: Michael Rapkins **Position:** QLD Branch Manager **Date:** 08/08/2023 **Signature:** Michael Rapkins

Assistant Assessor(s): **Position(s):**

Project Name: **Location:**

cense Class applicable to this vehicle, plant or other equipment.

Class	Type	Description	Yes
C	Car licence	Covers vehicles up to 4.5 tonnes gross vehicle mass (GVM). GVM is the maximum recommended weight a vehicle can be when loaded. The licence allows the holder to drive cars, utilities, vans, some light trucks, car-based motor tricycles, tractors and implements such as graders, vehicles that seat up to 12 adults, including the driver	☐
LR	Light Rigid	Covers a rigid vehicle with a GVM of more than 4.5 tonnes up to 8 tonnes. Any towed trailer must not weigh more than 9 tonnes GVM. This class also includes vehicles with a GVM up to 8 tonnes which carry more than 12 adults including the driver. A holder of a LR licence is also permitted to drive vehicles in class C	☐
MR	Medium Rigid	Covers a rigid vehicle with 2 axles and a GVM of more than 8 tonnes. Any towed trailer must not weigh more than 9 tonnes GVM. A holder of a MR licence is also permitted to drive vehicles in class LR and lower.	☐
HR	Heavy Rigid	Covers a rigid vehicle with 3 or more axles and a GVM of more than 8 tonnes. Any towed trailer must not weigh more than 9 tonnes GVM. This class also includes articulated buses. A holder of an HR licence is also permitted to drive vehicles in class MR and lower.	☐
HC	Heavy Combination	Covers heavy combination vehicles like a prime mover towing a semi-trailer, or rigid vehicles towing a trailer with a GVM of more than 9 tonnes. A holder of an HC licence is also permitted to drive vehicles in class HR and lower.	☐
MC	Multi-Combination	Covers multi-combination vehicles like road trains and B-double vehicles. A holder of an MC licence is also permitted to drive vehicles in class HC and lower.	☐
HRW	High Risk Work		☐
VOC	Verification of Competency		☐
LB	Front-end loader backhoe		☐
LE	Excavator		☐
LL	Front-end loader		☐
LP	Scraper		☐
LR	Road roller		☐
LG	Grader		☐
LS	Skid steer loader		☐
LZ	Dozer		☐

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Hierarchy of Controls	1. Elimination	2. Substitution	3. Isolation	4. Engineering	5. Administration	6. PPE

List other documentation relevant to this plant reviewed during this assessment i.e. SWMS, Manufacturer's Operators Manual etc.	☒ Operators Manual | ☐ Inspection Handbook | ☐ Pre-Start Checklist ☐ SWMS | ☐ SOP's | ☐ Other:

Maintenance and repair assessment	
Maintenance / repair being assessed:	Yes, records available
Number of people working on (or likely to be working on) plant:	Depending on type of work – minimum 1

Type of activity	Scheduled frequency	Inspection by	Location of maintenance
☒ Scheduled. As per manufacturers Handbook – inspections to be carried out:	Lighting Tower inspections done daily	Operator	☒ On site | ☐ Off site
	Lighting Tower – refer manufacturers recommendations and specifications	Competent & Authorised Person	☒ On site | ☒ Off site
			☐ On site | ☐ Off site
			☐ On site | ☐ Off site
			☐ On site | ☐ Off site
☒ Unscheduled	When and if it breaks down		☒ On site | ☒ Off site

Competency requirements for maintenance: (e.g. electrical, welding, etc.)	Only trained, qualified, competent and authorised persons may repair Lighting Tower
Mechanical Technician	Mechanical Technician
Electrical Technician	Electrical Engineer

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Energy Types	Specific examples
Gravity	Falling objects, falls of people
Kinetic energy	Projectiles, penetrating objects
Mechanical energy	Caught between, struck by, struck against
Hazardous substances	Skin contact, inhalation
Extremes of Temperature	Effects of heat or cold
Radiation	Ultraviolet, arc flashes, microwaves, lasers
Sound	Hearing damage
Electrical	Electric shock, burns
Vibration	Hand, whole body
Stress	Unrealistic workload and expectations

RISK MATRIX

CONSEQUENCE

Level	Insignificant	Minor	Moderate	Major	Catastrophic
Human Resources	First Aid injury	Medical Treatment	Single LTI	Multiple LTI	Fatality
Operational	Loss = 1 hr production	Loss = 6 hrs production	Loss = 12 hrs production	Loss = 3 – 7 days production	Greater than 1 week loss production
Property Damage	<$4,999	$5,000 - $49,000	$50,000 - $499,999	$500,000 - $999,999	>$1,000,000
Financial	>$1,000	>$10,000	>$100,000	>$1,000,000	>$10,000,000
Environment	Nil or Low impact	Low impact	Moderate impact	Major impact	Severe impact
Community	Isolated complaint	Sporadic complaints	Serious Rate of complaints	Increasing rate of complaints	High level of interest from community
Legal	Minor compliance breach	Low level compliance breach	Regulation breach	Major breach of regulation	Serious regulation/legal breach
Security	Violation of internal policies & procedures	Minor criminal offence	Low intensity civil unrest	Significant criminal offence	Major criminal offence

The risk associated with a hazard is related to the severity of a single incident, and the frequency and duration of exposure to the hazard. In many instances, other hazards present may increase the risk of an individual hazard.
STEP 1: Consider how likely a risk is encountered, and what might happen.

STEP 2: Use the risk level calculator to determine the likely risk level (outcome) to persons who may be exposed to the hazards.
STEP 3: Identify and develop effective control measures. (Consult the hierarchy of risk control measures when carrying out this step).

LEVEL OF CONSEQUENCES		CONSEQUENCES OF EVENT OCCURRING *What is the likely outcome of an exposure to the risk?*	LIKELIHOOD OF EVENT OCCURRING: Almost certain	Likely	Possible	Unlikely	Rare
1	**Catastrophic**	Fatality or permanent disability; toxic release of chemicals, long-term or irreversible environmental impact; loss of facilities; very high $ loss	**E (25)**	**E (24)**	**E (22)**	**E (19)**	**H (15)**
2	**Major**	Long-term illness or serious injury; serious but reversible environmental impact; major property damage; loss of production; high $ loss	**E (23)**	**E (21)**	**E (18)**	**H (14)**	**M (10)**
3	**Moderate**	Medical treatment requiring up to several days off work; reversible environmental impact; significant property damage; med – high $ loss	**E (20)**	**H (17)**	**H (13)**	**M (9)**	**M (6)**
4	**Minor**	Minor injury requiring First-Aid; minor reversible environmental impact; moderate property damage; low-med. $ loss	**H (16)**	**H (12)**	**M (8)**	**L (5)**	**L (3)**
5	**Insignificant**	No injuries or first aid only; minor property damage or environmental nuisance; very low $ loss	**M (11)**	**M (7)**	**L (4)**	**L (2)**	**L (1)**

LIKELIHOOD OF EVENT OCCURRING *How likely is it that an exposure will occur?*			DETERMINATION OF RISK CONTROL ACTIONS: RISK LEVEL (OUTCOME) *(from matrix)*		ACTION REQUIRED *(refer to the hierarchy of risk controls)*
A	**Almost certain**	Event is expected to occur in most circumstances			
B	**Likely**	Event will probably occur in most circumstances	**E**	(EXTREME)	**URGENT** - Immediate action required to control risk.
C	**Possible**	Event might occur at some time	**H**	(HIGH)	Highest management decision required urgently.
D	**Unlikely**	Event could occur at some time	**M**	(MEDIUM)	Follow management instructions regarding risk.
E	**Rare**	Event may occur only in exceptional circumstances	**L**	(LOW)	These risks may not require immediate attention - monitor.

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Section 1	Section 2	RISK associated with the Hazard	Section 4 Risk Score			CONTROL MEASURES	RESIDUAL RISK			
Hazard Category and Examples	Where and when might this hazard exist?		Refer to the Risk Matrix			Consider number of people required to carry out a task, training, skills and competencies required, licences, permits, etc., environmental controls, plant, tools and equipment, safety equipment and PPE, etc.	Refer to the Risk Matrix			Control
			L	C	R		L	C	R	
Competency: ☒ Yes ☐ No – Operator must prove verification of competency, qualifications (certification / license etc.) prior to operating this item of plant										
☒ Operator Competency	During routine maintenance During normal operation	Injuries including fracture; Crush Trauma injuries and other multiple injuries;	C	2	E18	• Only persons who have completed training and have been assessed as competent in the operation of the plant are to operate. If there is not a competent person available for operation of this item of plant, then only persons who are supervised by a competent person can operate this item of plant • This machine is not to be operated by persons under the influence of drugs and/or alcohol.	E	2	M10	Admin
	During transport - towing	Collision between vehicle / trailer and other vehicles / pedestrians	C	2	E18	• Tow vehicle driver to be licenced to drive tow vehicle and trained and competent to tow trailer. • Pre-start check of tow vehicle and trailer. • Driver must adhere to road rules and drive to conditions when towing trailer.	E	2	M10	Admin
	During transport – forklift/crane	Dropped machine Crush injury	C	1	E22	• Forklift operator must have forklift licence. • Crane operator must have correct HRWL for crane type being used to lift lighting tower.	E	1	H15	Admin
☒ Access and Egress	During normal operation	Collisions between vehicles, pedestrians and objects; Crush Trauma injuries and other musculoskeletal injuries; Impact injuries	C	2	E18	• Position Lighting Tower in an area away from other site pedestrian and vehicle/plant traffic. • Where possible provide physical barriers between Lighting Tower and site pedestrian and vehicle/plant traffic. • Access road ways and pedestrian walkways clearly delineated and signposted • Lighting Tower must be used in accordance with manufacturers operating instructions. • Seek approval from relevant authority before positioning lighting tower for work on roads.	E	2	M10	Admin
☐ Other (please specify)										

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Hazard Category and Examples	Where and when might this hazard exist?		Refer to the Risk Matrix			Consider number of people required to carry out a task, training, skills and competencies required, licences, permits, etc., environmental controls, plant, tools and equipment, safety equipment and PPE, etc.	Refer to the Risk Matrix			Control
			L	C	R		L	C	R	
Entanglement or being drawn into the plant: ☒ Yes ☐ No - Can anyone's hair, clothing, gloves, necktie, jewellery, rags and other materials become entangled with moving parts of plant, or materials in motion?										
☒ Arms, hands, fingers, or upper body	During setup and operation During repair and maintenance	Injuries including fracture Crush Trauma injuries and other multiple injuries;	C	2	E18	**Plant Controls –Lighting tower:** • Emergency stop button • Lockable battery Isolator for prevention of unplanned starts • Safety decals as per manufacturer's specifications • Inspection doors • Permanent fan guarding • Lockable type battery isolator **Operator / Procedural Controls:** • Complete daily prestart checklist prior to commencing work • Ensure equipment is operated by trained, qualified, competent and authorised personnel • Operate plant in accordance with the manufacturers operating and maintenance manual • Check to ensure emergency stop is working before using the lighting tower. • Correct PPE to be worn – refer operating manual • Keep area clear around the machine when raising and lowering the mast. • Ensure all covers/doors are closed and secured while machine is in operation. • Keep clear of all moving parts on the generator and engine. • Do not wear loose items of clothing and jewellery and contain long hair. • Ensure lighting tower is switched off, battery and control panel isolated when not in use. • Only trained, qualified, competent and authorised personnel to complete repair works • Review Lock Out / Tag Out procedure prior to performing advanced maintenance on lighting tower	E	2	M10	Admin PPE
☐ Legs, feet, or lower body										
☒ Hair, clothing or jewellery		Scalping Degloving	C	2	E18		E	2	M10	Admin
☐ Isolation of energy source										
☐ Other (please specify)										

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Hazard Category and Examples	Where and when might this hazard exist?		Refer to the Risk Matrix			Consider number of people required to carry out a task, training, skills and competencies required, licences, permits, etc., environmental controls, plant, tools and equipment, safety equipment and PPE, etc.	Refer to the Risk Matrix			Control
			L	C	R		L	C	R	
Crushing: ☒ Yes ☐ No - Can anyone be crushed due to falling, uncontrolled or unexpected movement of plant or its load, lack of capacity to slow, stop or immobilise the plant, tipping or rolling over, parts of plant collapsing, contact with moving parts during testing, inspection, maintenance, cleaning or repair, thrown off, under or trapped between plant and materials or fixed structures?										
☐ Exposed edges (falling)	During transport During set-up and operation During repair and maintenance					**Plant Controls – Lighting tower:** • Emergency stop button • Stabiliser legs • AMOSS – Automatic Mast Operating Safety System • Mast fastening strap • Lifting point, forklift lifting pockets, tie down points • Jockey wheel • Safety decals as per manufacturer's specifications **Operator / Procedural Controls:** • Ensure equipment is operated by trained, qualified, competent and authorised personnel • Lighting tower must be maintained in accordance with manufacturers recommendations and checked before each use. • Operate lighting tower in accordance with the manufacturers user manual • During transport the Mast Fastening Strap must be fully engaged and stabilisers in upright position. • When transporting lighting tower, never exceed maximum load weight of crane/forklift/tow vehicle. • Secure trailer on truck using tie down points if being transported by truck. Use safety chains when towing. • Ensure jockey wheel is down and locked in before unhitching trailer from tow vehicle. • Ensure the lighting tower is positioned on a solid, level surface and secured from movement. • Ensure area is clear of overhead obstructions before raising mast. • The lighting tower must be levelled and stabiliser legs extended before raising the mast. • Stabiliser legs must remain extended at all times while the mast is extended. • Exclusion zone to be established where lighting tower is operating. • Chock wheels to prevent trailer movement • Workers to wear safety boots and safety helmet.				
☐ Tools being dropped										
☒ Material falling or being ejected from working area		Damage to equipment Damage to other property or people	C	2	E18		E	2	M19	Eng Admin
☒ Plant Overturning		Damage to equipment Damage to other property or people	C	2	E18		E	2	M10	Eng Admin
☐ Uncontrolled movement of loads										
☒ Pinch points	During setup and pack up Durin repair and maintenance	Minor crush injury	C	3	H13	• Be aware of pinch points when adjusting lights and extending stabiliser legs	D	3	M9	Admin

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Hazard Category and Examples	Where and when might this hazard exist?		Refer to the Risk Matrix			Consider number of people required to carry out a task, training, skills and competencies required, licences, permits, etc., environmental controls, plant, tools and equipment, safety equipment and PPE, etc.	Refer to the Risk Matrix			Control
			L	C	R		L	C	R	
Cutting / Stabbing / Puncturing: ☒ Yes ☐ No - Can anyone be cut, stabbed or punctured by coming in contact with moving plant or parts, sharp or flying objects, work pieces ejected, work pieces disintegrated or other factors not mentioned?										
☐ Contact with flying parts or work pieces	During operation During repair and maintenance					• Ensure equipment is operated by trained, qualified, competent and authorised personnel • Operate plant in accordance with the manufacturers operating and maintenance manual • Check to ensure emergency stop is working before using the lighting tower. • Correct PPE to be worn – refer operating manual • Keep area clear around the machine when raising and lowering the mast. • Ensure all covers/doors are closed and secured while machine is in operation. • Keep clear of all moving parts on the generator and engine. • Ensure lighting tower is switched off and control panel isolated when not in use. • Only trained, qualified, competent and authorised personnel to complete repair works				
☐ Parts or work pieces breaking (disintegrating)										
☐ Work pieces ejected										
☐ Movement of plant or components										
☐ Isolation of energy sources										
☒ Body or body parts caught between moving components		Cuts, abrasions Amputations	C	2	E18		E	2	M10	Eng Admin PPE
☐ Other (please specify)										

Section 1	Section 2	RISK associated with the Hazard	Section 4 Risk Score			CONTROL MEASURES	RESIDUAL RISK			
Hazard Category and Examples	Where and when might this hazard exist?		Refer to the Risk Matrix			Consider number of people required to carry out a task, training, skills and competencies required, licences, permits, etc., environmental controls, plant, tools and equipment, safety equipment and PPE, etc.	Refer to the Risk Matrix			Control
			L	C	R		L	C	R	
Shearing: ☐ Yes ☒ No - Can anyone's body parts be cut off between two parts of the plant and a work piece or structure?										
☐ Body or body parts caught between moving components										
☐ Isolation of energy sources										
☐ Body or body parts shear when passing structure										
☐ Other (please specify)										

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Hazard Category and Examples	Where and when might this hazard exist?		Refer to the Risk Matrix			Consider number of people required to carry out a task, training, skills and competencies required, licences, permits, etc., environmental controls, plant, tools and equipment, safety equipment and PPE, etc.	Refer to the Risk Matrix			Control
			L	C	R		L	C	R	
Striking: ☒ Yes ☐ No - Can anyone be struck by moving objects due to plant or surfaces of the plant, or material handled by plant operation?										
☒ Uncontrolled or unexpected movement of plant	During transport and operation During repair and maintenance	Major impact trauma; Injuries including fracture; Other musculoskeletal injuries;	C	2	E18	**Plant Controls – Lighting tower:** • Emergency stop button • Stabiliser legs • Mast fastening strap • Lifting point, forklift lifting pockets, tie down points • Jockey wheel • Safety decals as per manufacturer's specifications **Operator / Procedural Controls:** • Ensure equipment is operated by trained, qualified, competent and authorised personnel • Lighting tower must be maintained in accordance with manufacturers recommendations and checked before each use. • Operate lighting tower in accordance with the manufacturers user manual • During transport the Mast Fastening Strap must be fully engaged and stabilisers in upright position. • When transporting lighting tower, never exceed maximum load weight of crane/forklift/tow vehicle. • Secure trailer on truck using tie down points if being transported by truck. • Use safety chains when towing lighting tower. • Ensure jockey wheel is down and locked in before unhitching trailer from tow vehicle. • Ensure the lighting tower is positioned on a level surface and secured from movement during operation. • The lighting tower must be levelled and stabiliser legs extended before raising the mast. • Stabiliser legs must remain extended at all times while the mast is extended. • Exclusion zone to be established where lighting tower is operating. • Chock wheels to prevent trailer movement. • Workers to wear safety boots and safety helmet.	E	2	M10	Admin
☐ Uncontrolled or unexpected movement of components or material (warning sirens required)										
☐ Moving objects due to Parts or work pieces breaking (disintegrating)										
☐ Work materials protruding into travel path of Plant.										
☐ Normal movement of plant										
☐ Isolation of energy sources										
☐ Other (please specify)										

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Hazard Category and Examples	Where and when might this hazard exist?		Refer to the Risk Matrix			Consider number of people required to carry out a task, training, skills and competencies required, licences, permits, etc., environmental controls, plant, tools and equipment, safety equipment and PPE, etc.	Refer to the Risk Matrix			Control
			L	C	R		L	C	R	
Explosion / Fire: ☒ Yes ☐ No - Can anyone be injured by an explosion of gas, vapours, liquids, dusts or other substances, triggered by plant operation?										
☐ Ignition of flammable atmosphere initiated by the plant	During operation During routine maintenance During refuelling					**Plant Controls - Screener:** • Safety decals as per manufacturer's specifications **Operator / Procedural Controls:** • Complete daily prestart checklist prior to commencing work • Ensure lighting tower is operated by trained, qualified, competent and authorised personnel • Keep engine area clean and free from oil and spills. • Correct PPE to be worn – Refer to applicable SWMS or perform a risk assessment • Do not refuel near open flames or ignition sources. • Refuel in well ventilated area. • Switch lighting tower off and allow to cool before refuelling. • Use spouts or funnels to avoid spillages. • Clean up fuel spill immediately. • Only trained, qualified, competent and authorised personnel to complete repair works • Emergency training of Operators including spill management. • A B (E) extinguisher fitted to plant. Instructions, including Emergency Site Procedures given at induction time. • Workers trained in the use of fire extinguisher				
☐ Ignition of flammable atmosphere initiated by material										
☐ Ignition of flammable material by the plant										
☒ Fire risk (flammables) / Emergency Equipment		Burns to operator; Fumes from fire; Damage to equipment	D	2	H14		D	3	M9	Admin
☐ Other (please specify)										

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			L	C	R		L	C	R	
Slips / Trips / Falls: ☒ Yes ☐ No - Can anyone using the plant or in the vicinity of the plant, slip, trip or fall due to the working environment or other factors?										
☒ Uneven or slippery work or access surfaces	During normal operation During repair and maintenance Pre-start inspections	Injuries including fracture Other musculoskeletal injuries;	C	3	H13	**Plant Controls – Lighting tower:** • Safety decals as per manufacturer's specifications **Operator / Procedural Controls:** • Exclude lighting tower area from others. • Lighting tower to be positioned on firm level surface in accordance with manufacturers instructions. • Ensure lighting tower is operated by trained, qualified, competent and authorised personnel • Ensure lighting tower is switched off and inspection doors locked when not in use. • Only trained, qualified, competent and authorised personnel to complete repair works • Clean up any liquid spills immediately • Ensure non-slip safety footwear is worn.	D	3	M9	Isol Admin PPE
☒ Housekeeping hazards produced by the plant		Bruises and lacerations	C	3	H13		E	3	M6	Isol Admin PPE
☐ Inadequate work platforms (size, location, fall protection)										
☐ Lack of guardrails or fall protection										
☐ Other (please specify)										

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			L	C	R		L	C	R	
High Pressure Fluid: ☒ Yes ☐ No - Can anyone come into contact with fluids under high pressure, due to failure or misuse of the plant?										
☐ Contact with fluids under pressure due to failure	During normal operation During routine maintenance					**Plant Controls – Lighting tower:** • Inspection covers • Radiator overflow bottle • Safety decals as per manufacturer's specifications **Operator / Procedural Controls:** • Complete daily prestart checklist prior to commencing work • Ensure lighting tower is operated by trained, qualified, competent and authorised personnel • Lighting tower must be operated in accordance with manufacturers operating instructions. • Correct PPE to be worn – Refer to operating manual, applicable SWMS or perform a risk assessment • Ensure lighting tower is switched off and inspection doors locked when not in use. • Ensure lighting tower is allowed to cool after use before being packed up, inspected or maintained. • Only trained, qualified, competent and authorised personnel to complete repair works. • Do not open radiator cap or cover while the engine is hot or running. • Clean up spills immediately				
☒ Contact with fluids under pressure due to misuse		Burns Slip, trip, fall	C	3	H13		E	3	M6	Admin PPE
☐ Striking due to severed high pressure hoses / couplings										
☐ Other (please specify)										

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			L	C	R		L	C	R	
Plant rolling over / through limits: ☒ Yes ☐ No - Can this item of plant roll or tip over due to operating over specified working limits?										
☒ Roll over hazards	During setup – extending mast During transport	Crush injury Property damage	C	2	E18	**Plant Controls – Lighting tower:** • Emergency stop button • Stabiliser legs • AMOSS – Automatic Mast Operating Safety System • Mast fastening strap • Lifting point, forklift lifting pockets • Jockey wheel • Safety decals as per manufacturer's specifications **Operator / Procedural Controls:** • Ensure equipment is operated by trained, qualified, competent and authorised personnel • Lighting tower must be maintained in accordance with manufacturers recommendations and checked before each use. • Transport and operate lighting tower in accordance with the manufacturers user manual. • During transport, the Mast Fastening Strap must be fully engaged and stabilisers must be in upright position. • During transport, never exceed maximum load weight of crane/forklift/tow vehicle. Use safety chains when towing. • Ensure jockey wheel is down and locked in before unhitching trailer from tow vehicle. • Ensure the lighting tower is positioned on a level surface and secured from movement. • Ensure area is clear of overhead obstructions before raising mast. • The lighting tower must be levelled and stabiliser legs extended before raising the mast. • Stabiliser legs must remain extended at all times while the mast is extended. • Exclusion zone to be established where lighting tower is operating. • Workers to wear safety boots and safety helmet.	E	2	M10	Eng Admin PPE
☐ Upper and lower limits										
☐ Other (please specify)										

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			L	C	R		L	C	R	
Working environment and ergonomics: ☒ Yes ☐ No - Can anyone be injured due to seating design, repetitive body movement or posture, excessive effort, poor workplace or plant design causing mental or physical stress, lack of consideration for human behaviour, poor lighting or others factors not mentioned?										
☐ Inadequate lighting levels	During normal operation; During routine maintenance					**Operator / Procedural Controls:** • Correct PPE to be worn – Refer to operating manual, applicable SWMS or perform a risk assessment • If issues occur ensure that these are placed on daily report and advised to the supervisor • Apply sunscreen regularly to exposed skin • Wear UV protected safety sunglasses • Drink water regularly to maintain hydration • Operator to take regular breaks as required • Rotate tasks • Operators to wear clothing and safety glasses which are UV rated				
☒ Glare from natural light		UV rays damage to eyes including cataracts, macular degeneration, pinguecula which may cause vision loss	C	3	H13		E	3	M6	PPE
☐ Placement and identification of controls										
☐ Seating design or seating location										
☐ Cramped or restricted work spaces (particularly for maintenance										
☐ Noise levels										
☐ Vibration										
☐ Biological										
☒ Heat and UV radiation		Dehydration; Melanoma via exposed skin damage	D	3	M9		D	4	L5	PPE Iso
☐ Location of plant in the workplace										
☐ Other (please specify)										

Highest Protection ← → Lowest

Hierarchy of Controls	1. Elimination	2. Substitution	3. Isolation	4. Engineering	5. Administration	6. PPE

Section 1	Section 2	RISK associated with the Hazard	Section 4 Risk Score			CONTROL MEASURES	RESIDUAL RISK			
Hazard Category and Examples	Where and when might this hazard exist?		Refer to the Risk Matrix			Consider number of people required to carry out a task, training, skills and competencies required, licences, permits, etc., environmental controls, plant, tools and equipment, safety equipment and PPE, etc.	Refer to the Risk Matrix			Control
			L	C	R		L	C	R	
Other Hazards: ☒ Yes ☐ No - Can anyone be injured or suffer ill health from exposure to:										
☒ Chemicals	During Operation During repair and maintenance	Corrosive battery acid	D	2	H14	• Only trained and authorised persons to maintain lighting tower • Lighting tower must be positioned in area with adequate ventilation. Do not use lighting tower in confined or restricted areas without adequate mechanical ventilation. • Identify overhead powerlines and do not position the lighting tower where there are overhead electric lines. • Contact the supply authority if power lines are present in work area.	E	2	M10	Admin
☐ Toxic Gases or vapours										
☒ Fumes / dusts		Exhaust fumes, asphyxiation	D	2	H14		E	2	M10	Admin
☒ Overhead / buried services		Electrocution Supply interruption	C	1	E22		E	1	H15	Admin
☒ Electrical		Electric shock	C	2	E18	**Plant Controls**: • RCD with push to run RCD test points • Lockable type battery isolator **Operator / Procedural Controls:** • Pre-start check of equipment – DO NOT USE if damaged. • Test the RCD monthly, do not use Lighting tower if the earth leakage circuit breaker is not working. • Only qualified and licenced Electrician should troubleshoot or repair electrical problems. • Disconnect electric power and switch off the engine before removing protective covers on electrical enclosures. • Open main circuit breaker before disconnecting battery cables. • Before removing any guards or starting any maintenance or repair work on the lighting tower, the power supply must be disconnected. • Never use the lighting tower if insulation on the electrical cable is damaged. • Operators aware of the emergency stop button location. • Ensure lighting tower is grounded • Ensure all parts of the lighting tower are dry before use or repair	E	2	M10	Isol Admin
☒ Hot parts		Burns	C	3	H13	• Keep inspection covers closed while machine is operating and until cooled when shutdown. • Do not touch exhaust vent or radiator cover or cap during or immediately after operation. • Allow all parts of machine to cool before touching machine.	E	3	M6	Admin
☒ Lighting of private property and public areas		Public nuisance	C	3	H13	• Ensure lighting is only directed towards work area. • Consideration to be given to private property owners when positioning lighting tower and mast height.	D	3	M6	Admin

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Hierarchy of Controls	1. Elimination	2. Substitution	3. Isolation	4. Engineering	5. Administration	6. PPE

Section 1	Section 2	RISK associated with the Hazard	Section 4 Risk Score			CONTROL MEASURES	RESIDUAL RISK			
Hazard Category and Examples	Where and when might this hazard exist?		Refer to the Risk Matrix			Consider number of people required to carry out a task, training, skills and competencies required, licences, permits, etc., environmental controls, plant, tools and equipment, safety equipment and PPE, etc.	Refer to the Risk Matrix			Control
			L	C	R		L	C	R	
Condition and suitability of plant:										
☒ Age and condition	During normal operation During routine maintenance	Not undergoing pre-start checks; Neglect	D	3	M9	**Plant Controls**: • Ensure lighting tower is maintained in accordance with manufacturer's specifications. **Operator / Procedural Controls**: • Complete daily prestart checklist prior to commencing work • Ensure equipment is operated by trained, qualified, competent and authorised personnel • Correct PPE to be worn – Refer to operating manual, applicable SWMS or perform a risk assessment • Only trained, qualified, competent and authorised personnel to complete repair works • If operator/mechanic is working on plant, the plant shut down & start-up must be monitored by mechanic, machine must be isolated prior to working on machine.	D	4	L5	Admin
☒ Service and maintenance history		Not following service schedule per Manufacturer' instructions	D	3	M9		D	4	L5	Admin
☐ Not fit for purpose										
☐ Inability to apply isolation/lock out devices										
☐ Accessories in unsafe condition										
☐ Modification from original design										
☐ Safe working load identified										
☐ Other (please specify)										

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Hierarchy of Controls	1. Elimination	2. Substitution	3. Isolation	4. Engineering	5. Administration	6. PPE

Section 1	Section 2	RISK associated with the Hazard	Section 4 Risk Score			CONTROL MEASURES	RESIDUAL RISK			
Hazard Category and Examples	Where and when might this hazard exist?		Refer to the Risk Matrix			Consider number of people required to carry out a task, training, skills and competencies required, licences, permits, etc., environmental controls, plant, tools and equipment, safety equipment and PPE, etc.	Refer to the Risk Matrix			Control
			L	C	R		L	C	R	
System of work relating to the plant:										
☒ Emergency procedures relating to the plant	During normal operation; During routine maintenance	Lack of emergency training	D	2	H14	**Plant Controls:** • Safety decals as per manufacturer's specifications • Emergency stop button. **Operator / Procedural Controls:** • Complete daily prestart checklist prior to commencing work • Ensure lighting tower is operated by trained, qualified, competent and authorised personnel • Operate lighting tower in accordance with the manufacturers user manual. • Emergency training of Operators including spill management. • Correct PPE to be worn – Refer to operating manual, applicable SWMS or perform a risk assessment • Ensure all operators are inducted into site emergency procedures • Activate site emergency procedures in the event of an emergency • Ensure inspection doors are secured to prevent unauthorised access. • Tow hook must be isolated to prevent theft.	D	3	M9	Admin
☐ Communication systems associated with plant operation										
☐ Communication methods with plant operation										
☐ Use of Permit to Work system										
☒ Start up and shut down procedures		Failure to follow Manufacturer's recommendation for pre-start and shut down processes	D	2	H14		D	3	M9	Admin
☒ Secure against unauthorised use/access		Personal injury Property damage	C	2	E18		E	2	M10	Admin
☐ Storage or restoration to service requirements										
☐ Other (please specify)										

Highest Protection ◄——————————————————————————► Lowest

Hierarchy of Controls	1. Elimination	2. Substitution	3. Isolation	4. Engineering	5. Administration	6. PPE

Section 1	Section 2	RISK associated with the Hazard	Section 4 Risk Score			CONTROL MEASURES	RESIDUAL RISK			
Hazard Category and Examples	Where and when might this hazard exist?		Refer to the Risk Matrix			Consider number of people required to carry out a task, training, skills and competencies required, licences, permits, etc., environmental controls, plant, tools and equipment, safety equipment and PPE, etc.	Refer to the Risk Matrix			Control
			L	C	R		L	C	R	
Environmental issues cause failure:										
☒ Inclement weather causes issues	During normal operation	Damage to equipment and property	D	3	M9	**Operator / Procedural Controls:** • Lower the mast and switch off when the lighting tower is not in use, or if high winds (> 110km/h) or electrical storms are forecast. • Ensure all inspection doors and covers are closed. • Seek shelter from inclement weather. • Complete daily prestart checklist prior to recommencing work when inclement weather subsides. • Check for any water or dampness, and dry thoroughly before use. • Ensure lighting tower is operated by trained, qualified, competent and authorised personnel. • When towing or transporting lighting tower, drive to the conditions. Avoid pot holes and debris on the road.	D	4	L5	Admin
☐ Wind fowls cables and snags or breaks cable										
☐ Water impairs operation										
☒ Wind speed exceeds recommended limit		Damage to equipment and property	D	3	M9		D	4	L5	Admin
☐ Other (please specify)										

Highest Protection ◄——————————————————————————————► Lowest

Hierarchy of Controls	1. Elimination	2. Substitution	3. Isolation	4. Engineering	5. Administration	6. PPE

Completed by: _____ Contact details: _____

Reviewed by: _____ Contact details: _____

I have reviewed the Plant Risk Assessment and have had the opportunity to comment and make changes as I thought necessary.

Name	Position description	Signature	Date	Plant Model No.	Plant Serial No.

Highest Protection ← → Lowest

Hierarchy of Controls	1. Elimination	2. Substitution	3. Isolation	4. Engineering	5. Administration	6. PPE

Additional controls:
For each additional control, identify appropriate corrective actions, including priority, timeframes and responsibilities, communicate the requirements to the person responsible and the input the information into the Corrective Action Register.

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Legislation / Codes of Practice - QLD	*Legislation / Codes of Practice - NSW*
Work Health and Safety Act 2011 Work Health and Safety Regulations 2011 Electrical Safety CoP – Working near overhead and underground electric lines First Aid in the Workplace CoP Hazardous Manual Tasks CoP How to Manage Work Health and Safety Risks CoP Managing Noise and Preventing Hearing Loss at Work CoP Managing risks of hazardous chemicals in the workplace CoP Managing electrical risks in the workplace CoP Managing risks of plant in the Workplace CoP Managing the work environment and facilities CoP Traffic Management for construction or maintenance work CoP Work Health and Safety Consultation, Cooperation and Coordination CoP	Work Health and Safety Act 2011 Work Health and Safety Regulations 2017 Construction Work CoP First Aid in the Workplace CoP Hazardous Manual Tasks CoP How to Manage Work Health and Safety Risks CoP Managing Electrical Risks CoP Managing Noise and Preventing Hearing Loss at Work CoP Managing risks of hazardous chemicals in the workplace CoP Managing Risks of Plant in the Workplace CoP Managing the Work Environment and Facilities CoP Moving plant on construction sites Pre-WHS CoP Work Health and Safety Consultation, Cooperation and Coordination CoP Work near overhead power lines Pre-WHS CoP
Legislation / Compliance Codes - VIC:	***Legislation / Codes of Practice - ACT***
Occupational Health and Safety Act 2004 Occupational Health and Safety Regulations 2017 Compliance code: Communicating occupational health and safety across languages Compliance code: First aid in the workplace Compliance code: Hazardous manual handling Compliance code: Hazardous substances Compliance code: Noise Compliance code: Plant Compliance code: Workplace amenities and work environment	Work Health and Safety Act 2011 Work Health and Safety Regulations 2011 Construction Work CoP First Aid in the Workplace CoP Hazardous Manual Tasks CoP How to Manage Work Health and Safety Risks CoP Managing Electrical Risks in the Workplace CoP Managing Noise and Preventing Hearing Loss at Work CoP Managing Risks of Hazardous Chemicals in the Workplace CoP Managing Risks of Plant in the Workplace CoP Managing the Work Environment and Facilities CoP Work Health and Safety Consultation, Cooperation and Coordination CoP
Legislation / Codes of Practice - SA	***Legislation / Codes of Practice - WA***
Work Health and Safety Act 2012 Work Health and Safety Regulations 2012 First Aid in the Workplace CoP Hazardous Manual Tasks CoP How to Manage Work Health and Safety Risks CoP Managing Electrical Risks in the Workplace CoP Managing Noise and Preventing Hearing Loss at Work CoP Managing Risks of Hazardous Chemicals in the Workplace CoP Managing the Risks of Plant at Workplaces CoP Managing the Work Environment and Facilities CoP Work Health and Safety Consultation, Cooperation and Coordination CoP	Work Health and Safety Act 2020 Work Health and Safety (General) Regulations Construction work CoP First aid in the workplace CoP Hazardous manual tasks CoP How to manage work health and safety risks CoP Managing noise and preventing hearing loss at work CoP Managing risks of hazardous chemicals in the workplace CoP Managing risks of plant in the workplace CoP Managing the work environment and facilities Work health and safety consultation, cooperation and coordination CoP

Highest Protection ← → Lowest

Hierarchy of Controls	1. Elimination	2. Substitution	3. Isolation	4. Engineering	5. Administration	6. PPE

Legislation / Codes of Practice - NT	*Legislation / Codes of Practice - TAS*
Work Health and Safety (NUL) Act 2011 Work Health and Safety (NUL) Regulations 2011 Construction Work CoP First Aid in the Workplace CoP Hazardous Manual Tasks CoP How to Manage Work Health and Safety Risks CoP Managing Electrical Risks in the Workplace CoP Managing Noise and Preventing Hearing Loss at Work CoP Managing Risks of Hazardous Chemicals in the Workplace CoP Managing Risks of Plant in the Workplace CoP Managing the Work Environment and Facilities CoP Work Health and Safety Consultation, Cooperation and Coordination CoP	Work Health and Safety Act 2012 Work Health and Safety Regulations 2022 Construction Work CoP First Aid in the Workplace CoP Hazardous Manual Tasks CoP How to Manage Work Health and Safety Risks CoP Managing Electrical Risks in the Workplace CoP Managing Noise and Preventing Hearing Loss at Work CoP Managing Risks of Hazardous Chemicals in the Workplace CoP Managing the Risks of Plant at Workplaces CoP Managing the Work Environment and Facilities CoP Work Health and Safety Consultation, Cooperation and Coordination CoP

Highest Protection ◄——————————————————————————————► Lowest

Hierarchy of Controls	1. Elimination	2. Substitution	3. Isolation	4. Engineering	5. Administration	6. PPE